



TITLE V OPERATING PERMIT

Issued pursuant to Title 22a of the Connecticut General Statutes (CGS), Section 22a-174-33 of the Regulations of Connecticut State Agencies (RCSA), and pursuant to the Code of Federal Regulations (CFR), Title 40, Part 70.

Title V Operating Permit Number	176 - 0006 - TV
Client / Sequence / Town / Premises Numbers	5830 - 1 - 176 - 5
Date Issued	June 10, 2002
Expiration Date	June 10, 2007

Corporation:

Exeter Energy Limited Partnership

Premises Location:

10 Exeter Drive, Sterling, Connecticut 06377

Name of Responsible Official and Title:

Mr. Kenneth Wycherley, General Manager

All the following attached pages 2 through 50, are hereby incorporated by reference into this Title V Operating Permit.

ARTHUR J. ROCQUE, JR.
Arthur J. Rocque, Jr.
Commissioner

June 10, 2002
Date

TABLE OF CONTENTS

List of Acronyms

Section I. Premises Information/Description

- A. PREMISES INFORMATION
- B. PREMISES DESCRIPTION.

Section II. Emissions Units Information

- A. EMISSIONS UNITS IDENTIFICATION - TABLE II.A
 - EU-01 - EU-07
 - EU-08 - EU-12
- B. STANDARD & ALTERNATIVE OPERATING SCENARIOS - TABLE II.B
- C. PREMISES-WIDE MONITORING, RECORDING, & REPORTING REQUIREMENTS

Section III. Applicable Requirements and Compliance Demonstration

- A. EU-01, -02, & -12 (BOILERS/INCINERATORS PLUS CALCINER)
 - A.1. APPLICABLE REQUIREMENTS -TABLE III.A.1
 - A.2. CEM REPORTING AND ENFORCEMENT MATRIX - TABLE III.A.2
 - A.3. COMPLIANCE DEMONSTRATION - GENERAL REQUIREMENTS
 - A.4. COMPLIANCE DEMONSTRATION - POLLUTANT SPECIFIC
- B. EU-03 - EU-04 (EMERGENCY ENGINES)
 - APPLICABLE REQUIREMENTS - TABLE III.B
 - COMPLIANCE DEMONSTRATION
- C. EU-05 - EU-07 (SILOS)
 - APPLICABLE REQUIREMENTS - TABLE III.C
 - COMPLIANCE DEMONSTRATION
- D. EU-08 (FIRE PUMP - GPPE)
 - APPLICABLE REQUIREMENTS - TABLE III.D
 - COMPLIANCE DEMONSTRATION
- E. EU-09 (COOLING TOWER)
 - APPLICABLE REQUIREMENTS - TABLE III.E
 - COMPLIANCE DEMONSTRATION
- F. EU-10 (NO. 2 FUEL OIL STORAGE TANK)
 - APPLICABLE REQUIREMENTS - TABLE III.F
 - COMPLIANCE DEMONSTRATION
- G. EU-11(GASOLINE STORAGE TANK)
 - APPLICABLE REQUIREMENTS - TABLE III.G
- H. PREMISES-WIDE GENERAL REQUIREMENTS
 - APPLICABLE REQUIREMENTS - TABLE III.H
 - COMPLIANCE DEMONSTRATION
- I. 112(r) ACCIDENTAL RELEASE REQUIREMENTS
- J. ASBESTOS REQUIREMENTS
- K. STRATOSPHERIC OZONE DEPLETING SUBSTANCES (40 CFR PART 82) REQUIREMENTS

TABLE OF CONTENTS, Continued

Section IV. Compliance Schedule - Table IV

Section V. State Enforceable Terms and Conditions

Section VI. Permit Shield

Section VII. Title V Requirements

- A. SUBMITTAL TO THE COMMISSIONER & ADMINISTRATOR
- B. CERTIFICATIONS [RCSA 22a-174-33(b)]
- C. AUTHORIZED REPRESENTATIVE [RCSA 22a-174-2a(a)]
- D. ADDITIONAL INFORMATION [RCSA 22a-174-33(j)(1)(X)]
- E. MONITORING REPORTS [RCSA 22a-174-33(o)(1)]
- F. PREMISES RECORDS [RCSA 22a-174-33(o)(2)]
- G. PROGRESS REPORTS [RCSA 22a-174-33(q)(1)]
- H. COMPLIANCE CERTIFICATIONS [RCSA 22a-174-33(q)(2)]
- I. PERMIT DEVIATION NOTIFICATIONS [RCSA 22a-174-33(p)]
- J. PERMIT EXPIRATION AND RENEWAL APPLICATION [RCSA 22a-174-33(j)(1)(B)]
- K. OPERATE IN COMPLIANCE [RCSA 22a-174-33(j)(1)(C)]
- L. COMPLIANCE WITH PERMIT [RCSA 22a-174-33(j)(1)(G)]
- M. INSPECTION TO DETERMINE COMPLIANCE [RCSA 22a-174-33(j)(1)(M)]
- N. PERMIT AVAILABILITY
- O. SEVERABILITY CLAUSE [RCSA 22a-174-33(j)(1)(R)]
- P. NEED TO HALT OR REDUCE ACTIVITY [RCSA 22a-174-33(j)(1)(T)]
- Q. PERMIT REQUIREMENTS [RCSA 22a-174-33(j)(1)(V)]
- R. PROPERTY RIGHTS [RCSA 22a-174-33(j)(1)(W)]
- S. ALTERNATIVE OPERATING SCENARIO RECORDS [RCSA 22a-174-33(o)(3)]
- T. OPERATIONAL FLEXIBILITY AND OFF-PERMIT CHANGES [RCSA 22a-174-33(r)(2)]
- U. INFORMATION FOR NOTIFICATION [RCSA 22a-174-33(r)(2)(A)]
- V. TRANSFERS [RCSA 22a-174-2a(g)]
- W. REVOCATION [RCSA 22a-174-2a(h)]
- X. REOPENING FOR CAUSE [RCSA 22a-174-33(s)]
- Y. CREDIBLE EVIDENCE

List of Acronyms

ACRONYM	DESCRIPTION
AOS	Alternate Operating Scenario
CEM	Continuous Emission Monitor
Cd	Cadmium
CFR	Code of Federal Regulations
CISWI	Commercial & Industrial Solid Waste Incinerator
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CO/CO ₂	Combustion Efficiency
dscf	Dry Standard Cubic Feet
dscm	Dry Standard Cubic Meter
ESP	Electrostatic Precipitator
EU	Emission Unit
EPA	Environmental Protection Agency
EF	Degrees Fahrenheit
GPEE	General Permit to Construct and/or Operate a New or Existing Emergency Engine
HAP	Hazardous Air Pollutant
H ₂ SO ₄	Sulfuric Acid
HCl	Hydrogen Chloride
Hg	Mercury
ITT	Intent-to-Test
kPa	Kilo Pascal
lb/MMBTU	Pound per Million British Thermal Units
mg	Milligrams
MR&R	Monitoring, Record Keeping, and Reporting
MWC	Municipal Waste Combustor
ng	Nanograms
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standard
NSR	New Source Review
O ₂	Oxygen
PAH	Polynuclear Hydrocarbons
Pb	Lead
PCB	Polychlorinated Biphenyls
Δg	Picograms
PM	Particulate Matter
ppmvd	Parts per million volume, dry
PSIA	Pounds per Square Inch
RMP	Risk Management Plan
RCSA	Regulations of Connecticut State Agencies
SIP	State Implementation Plan
SOS	Standard Operating Scenario
SO _x	Sulfur Oxides
TSP	Total Suspended Particulate
TPY	Tons per Year
VOC	Volatile Organic Compound
:g	Micrograms

Title V Operating Permit

All conditions in Sections III, IV, and VI of this Title V operating permit are enforceable by both the Administrator and the Commissioner unless otherwise specified. Applicable requirements and compliance demonstration are set forth in Section III of this Title V operating permit. The Administrator or any citizen of the United States may bring an action to enforce all permit terms or conditions or requirements contained in Sections III, IV, and VI of this Title V operating permit in accordance with the Clean Air Act (CAA), as amended.

Section I: Premises Information/Description

A. PREMISES INFORMATION

Nature of Business: Electric generation via waste tire incinerator.
Primary SIC: 4953
Other SIC: N/A
Facility Mailing Address: Exeter Energy
10 Exeter Drive
Sterling, CT 06377

Telephone Number: (860) 564-7000

B. PREMISES DESCRIPTION

Exeter Energy, Limited Partnership (the Permittee) operates a waste tire incineration premises and processes approximately ten million tires per year. The recovered heat energy is used to generate a maximum of 26 megawatts/year of electricity. The Permittee is a major stationary source of NO_x, SO_x, and HAP emissions and has four active operating permits and a registration under the “*General Permit to Construct and/or Operate a New or Existing Emergency Engine*” (GP_{EE}). Emissions units on the premises include:

- Two waste tire-fired incinerators/boilers each with three reciprocating grates (EU-01 & EU-02), rated at 181 MMBTU/hr each, which are permitted (Permit Nos. 176-0001 & -0002) under the New Source Review (NSR) Prevention of Significant Deterioration (PSD) regulations. The boilers fire No. 2 diesel oil, propane, and shredded or whole tires. Air pollution control equipment includes a thermal de-NO_x system with injected urea, an electrostatic precipitator, a wet lime scrubber, and a fabric filter.
- Two emergency engines (EU-03 & EU-04), Cummins, 1100 KTA52DGS, rated at 11.2 MMBTU/hr each which are permitted (Permit Nos. 176-0003 & -0004) under the NSR program. The engines fire No. 2 diesel oil.
- Three storage and loading silos (EU-05, -06, & -07) which store fly ash and lime. These units do not require permits.
- One fire pump (EU-08) which is registered (Approval of Registration No. 176-0005-GP_{EE}) under the GP_{EE}.
- One cooling tower (EU-09).
- One 30,000-gallon tank (EU-10) which stores No. 2 fuel oil and one 250-gallon tank (EU-11) which stores gasoline.
- An electric-powered rotary calciner (EU-12) that removes Zinc and Zinc Oxides for recycling from the fly ash. This unit vents to the incinerator and is hence grouped with EU-01 and EU-02 as GEU-01.

The Permittee is not subject to the New Source Performance Standards (NSPS), Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subparts Ea, Cb, AAAA, CCCC, and DDDD, for municipal waste combustors. The Permittee is also exempt from RCRA §§22a-174-22a and -22b.

Section II: Emissions Units Information

A. EMISSIONS UNITS IDENTIFICATION

Emission Units are set forth and detailed in Table II.A.

TABLE II.A: EMISSIONS UNITS IDENTIFICATION			
Emissions Unit	Emissions Unit Description	Control Unit Description	Permit, Order, or Registration Number ^[1]
EU-01	Incinerator/boiler w/three reciprocating grates, 181 MMBTU/hr, waste tire-fired	<ul style="list-style-type: none"> - Urea injection/ thermal de-NO_x system - Electrostatic precipitator (ESP) - Fabric filter (FF) - Wet lime scrubber (WLS) 	Permit No. 176-0001
EU-02	Incinerator/boiler w/ three reciprocating grates, 181 MMBTU/hr, waste tire-fired	<ul style="list-style-type: none"> - Urea injection/ thermal de-NO_x system - Electrostatic precipitator (ESP) - Fabric filter (FF) - Wet lime scrubber (WLS) 	Permit No. 176-0002
EU-03	Emergency engine, Cummins, 1100 KTA52DGS, 11.2 MMBTU/hr	None	Permit No. 176-0003
EU-04	Emergency engine, Cummins, 1100 KTA52DGS, 11.2 MMBTU/hr	None	Permit No. 176-0004
EU-05	Silo, lime	Fabric filter	Not required
EU-06	Silo, fly ash	Fabric filter	Not required
EU-07	Silo, fly ash loading	Fabric filter	Not required

^[1] It is not intended to incorporate by reference these New Source Review Permits, Orders, or Registrations into this Title V Operating Permit.

Section II: Emissions Units Information

A. EMISSIONS UNITS IDENTIFICATION, CONTINUED

TABLE II.A: EMISSIONS UNITS IDENTIFICATION			
Emissions Units	Emissions Unit Description	Control Unit Description	Permit, Order, or Registration Number ^[1]
EU-08	Fire pump, Cummins, 155 kW, 6BTA 5.9 F1	None	Approval of Registration No. 176-0005-GPEE
EU-09	Cooling tower	None	Not required
EU-10	30,000-gallon storage tank (vertical fixed roof), No. 2 fuel oil	None	Permit Application Required
EU-11	250-gallon storage tank (horizontal fixed roof), gasoline	None	Not Required
EU-12	Rotary calciner, electrically-heated	Vents to EU-01 & EU-02 - refer to those control units	Not Required

^[1] It is not intended to incorporate by reference these New Source Review Permits, Orders, or Registrations into this Title V Operating Permit.

Section II: Emissions Units Information

B. STANDARD & ALTERNATIVE OPERATING SCENARIOS

The Permittee shall be allowed to operate under the following scenario without notifying the Commissioner, provided that such operations are explicitly provided for and described in Table II.B below. The permittee shall record contemporaneously, the operating scenario under which each emissions unit is operating in a log to be kept at the subject premises. **There are no alternate operating scenarios for the premises.** The standard operating scenario (SOS) is detailed in Table II.B below.

TABLE II.B: OPERATING SCENARIOS		
Identification of Operating Scenario	Emissions Units Associated with the Scenario	Description of Scenario
SOS	EU-01, EU-02, & EU-12	The Permittee operates Boilers/Incinerators firing any combination of shredded or whole tires, No. 2 fuel oil, and propane. The calciner, EU-12, is electrically powered. Air pollution control equipment shall be in operation at all times the incinerators/boilers are in operation, except during periods of start-up and shutdown.
	EU-03, EU-04, & EU-08	The Permittee operates emergency engines and fire pump firing No. 2 fuel (diesel) oil.
	EU-05, 06, -07, & -09	The Permittee operates silos and cooling tower in this SOS.
	EU-10	The Permittee stores No. 2 fuel (diesel) oil in EU-10.
	EU-11	The Permittee stores gasoline in EU-11.

Section II: Emissions Units Information

C. PREMISES-WIDE MONITORING, RECORDING, & REPORTING REQUIREMENTS

Premises-Wide Monitoring Requirements:

- *In accordance with Section VI.E of this Title V operating permit, the Permittee shall submit to the Commissioner on a semi-annual basis (once every six (6) months) a written monitoring report [RCSA  22a-174-33(o)(1) & 40 CFR  70.6(a)(3)(iii)].*
- *Unless otherwise required by this permit, the Permittee shall verify compliance with the emissions limitations and operation restrictions set forth in Section III of this Title V operating permit, at a minimum, on a semi-annual basis [RCSA  22a-174-33(o)(1)].*

Premises-Wide Recording & Reporting Requirements: The Permittee shall:

- *Maintain records, in accordance with Section VI.F of this Title V operating permit, of all required monitoring data and supporting information for a minimum of five (5) years commencing on the date such records were created and kept on site at the premises [RCSA  22a-174-33(o)(2) & 40 CFR  70.6(a)(3)(ii)];*
- *Have certified by a responsible official, in accordance with Section VI.B and VI.C of this Title V operating permit, any report or document required by this Title V operating permit and any other information submitted to the Commissioner or Administrator [40 CFR  70.6(c)(1)];*
- *Provide any records and/or additional information to the Commissioner, in accordance with Section VI.D of this Title V operating permit, within thirty (30) days of receipt of a written request from the Commissioner or such sooner time as the Commissioner may require [RCSA  22a-174-4(c)(1)]; and*
- *Record annual emissions and submit such annual emissions inventory statements to the Commissioner once per year [RCSA  22a-174-4(c)(1), Connecticut State Implementation Plan (CT SIP) for Air Quality Emission Statements].*

The following tables contain summaries of applicable regulations and limitations and/or restrictions for each identified Emissions Unit and Operating Scenario, regulated by this Title V operating permit. Each Compliance Demonstration requirement is designated a condition number and is delineated below. Note: “F or S” denotes enforceability. “F” = federal and state enforceable conditions, “S” = state only enforceable conditions.

Section III: Applicable Requirements and Compliance Demonstration

A. EU-01, EU-02, & EU-12, INCINERATORS/BOILERS PLUS CALCINER

A.1. APPLICABLE REQUIREMENTS

TABLE III.A.1: EU-01, -02, & -12, APPLICABLE REQUIREMENTS				
Pollutant or Process Parameter	Limitations or Restrictions	Applicable Regulatory References/Citations	Compliance Demonstration Condition Number	F / S
NO _x	Less than or equal to: 1.) 0.12 lb/MMBTU ^[2] 21.99 lb/hr ^[2] (171.6 tons per year (TPY)) ^[3] 2.) 79 ppmvd @ 7% O ₂	1.) Permit Nos. 176-0001 & 176-0002 2.) RCSCA §22a-174-38(c)	A.1.1	F
SO _x	Less than or equal to 0.30% sulfur by weight (dry basis) in No. 2 fuel oil	CGS §16a-21a	A.1.2	S
	Less than or equal to 1.0% sulfur by weight (dry basis) in propane	RCSCA §22a-174-19(a)(2)		F
	Less than or equal to: 1.) 0.109 lb/MMBTU ^[2] 19.68 lb/hr ^[2] (153.5 TPY) ^[3] 2.) 51 ppmvd @ 7% O ₂ or a 75% reduction by weight or volume	1.) Permit Nos. 176-0001 & 176-0002 2.) RCSCA §22a-174-38(c)		F
TSP	Less than or equal to: 0.02 lb/MMBTU ^[2] 3.617 lb/hr ^[2] (28.2 TPY) ^[3] 0.010 grain/dry standard cubic feet (= 22.88 mg/dscm) @ 12% CO ₂	Permit Nos. 176-0001 & 176-0002 & RCSCA §22a-174-38(c)	A.1.3	F
Opacity	Less than or equal to 10% ^[4]	RCSCA §22a-174-38(c) & Permit Nos. 176-0001 & 176-0002	A.1.4	F
CO	Less than or equal to: 1.) 0.167 lb/MMBTU ^[2] 30.2 lb/hr ^[2] (235.6 TPY) ^[3] 2.) 180 ppmvd @ 12% CO ₂	1.) Permit Nos. 176-0001 & 176-0002 2.) RCSCA §22a-174-38(c) & Permit Nos. 176-0001 & 176-0002	A.1.5	F
VOC	Less than or equal to: 0.03 lb/MMBTU ^[2] 6.25 lb/hr ^[2] (48.8 TPY) ^[3] 41 ppmvd @ 12% CO ₂	Permit Nos. 176-0001 & 176-0002	A.1.6	F
Combustion Temperature	Greater than 1800 EF at any time tires are in firebox	Permit Nos. 176-0001 & 176-0002	A.1.7	F

^[2] The instantaneous limits in lb/MMBTU, ppmvd, grains/dscf, :g/m³, %O₂, the combustion temperature, and the CO/CO₂ ratio shall not apply during periods of start-up, shutdown, or malfunction but the lb/hr limit shall apply at all times. The instantaneous limitations will take effect only during steady state, continuous burn operations when the incinerator/boiler is continuously, semi-continuously, or batch fed waste tires.

^[3] The annual emissions limit in TPY is for both boilers combined.

^[4] The opacity limit shall apply at all times including during periods of start-up, shutdown, and malfunctioning [RCSCA §22a-174-38(c)(1)(B)].

Section III: Applicable Requirements and Compliance Demonstration

A. EU-01, EU-02, & EU-12, INCINERATORS/BOILERS PLUS CALCINER

A.1. APPLICABLE REQUIREMENTS, CONTINUED

TABLE III.A.1: EU-01, -02, -12, APPLICABLE REQUIREMENTS				
Pollutant or Process Parameter	Limitations or Restrictions	Applicable Regulatory References/Citations	Compliance Demonstration Condition Number	F / S
O ₂	A minimum of 3.0% O ₂ in flue gas measured before any air pollution control device	Permit Nos. 176-0001 & 176-0002	A.1.8	F
Combustion Efficiency (CO/CO ₂)	Ratio of 0.002 or less in stack exhaust	Permit Nos. 176-0001 & 176-0002	A.1.9	F
Fuel Feed Rate	Less than or equal to 181 MMBTU/hr	Permit Nos. 176-0001 & 176-0002	A.1.10	F
Fugitive Ash	Visible emissions of combustion ash shall not exceed 5% of the observation period	RCSA §22a-174-38(f)(1)	A.1.11	F
HAPS:	Less than or equal to:		A.1.12	F
H ₂ SO ₄	0.028 lb/MMBTU or 5.10 lb/hr ^[2] 8475 :g/m ³ ^[2]	Permit Nos. 176-0001 & 176-0002		
HCl	29 ppmv wet HCl @ 7% O ₂ ^[2] or A minimum of 95% HCl removal efficiency, whichever is least stringent	RCSA §22a-174-38(c) & Permit Nos. 176-0001 & 176-0002		
Lead (Pb)	1.) 1.14 x 10 ⁻⁵ lb/MMBTU & 0.002 lb/hr ^[2] 2.) 0.44 mg/dscm ^[2]	1.) Permit Nos. 176-0001 & 176-0002 2.) RCSA §22a-174-38(c)		
Dioxin/Furan	1.) 3.37 x 10 ⁻⁸ lb/hr ^[2] 2.) 55.7 Δg/m ³ (= 0.0557 0g/m ³) ^[2]	1.) Permit Nos. 176-0001 & 176-0002 2.) Permit Nos. 176-0001 & 176-0002 & RCSA §22a-174-38(c)		
Mercury	1.) 1.03 x 10 ⁻³ lb/hr ^[2] 2.) 1.7 :g/m ³ (= 0.0017 mg/dscm) ^[2]	1.) Permit Nos. 176-0001 & 176-0002 2.) Permit Nos. 176-0001 & 176-0002 & RCSA §22a-174-38(c)		
Cadmium Oxide as Cd	0.47 :g/m ³ (= 0.00047 mg/dscm) ^[2]	Permit Nos. 176-0001 & 176-0002 & RCSA §22a-174-38(c)		

^[2] The instantaneous limits in lb/MMBTU, ppmvd, grains/dscf, :g/m³, %O₂, the combustion temperature, and the CO/CO₂ ratio shall not apply during periods of start-up, shutdown, or malfunction but the lb/hr limit shall apply at all times. The instantaneous limitations will take effect only during steady state, continuous burn operations when the incinerator/boiler is continuously, semi-continuously, or batch fed waste tires.

Section III: Applicable Requirements and Compliance Demonstration

A. EU-01, EU-02, EU-12, INCINERATORS/BOILERS PLUS CALCINER

A.1. APPLICABLE REQUIREMENTS, CONTINUED

TABLE III.A.1: EU-01, -02, -12, APPLICABLE REQUIREMENTS				
Pollutant or Process Parameter	Limitations or Restrictions	Applicable Regulatory References/Citations	Compliance Demonstration Condition Number	F/S
HAPs, continued:	Less Than or Equal to:	Permit Nos. 176-0001 & 176-0002	A.1.12	F
Arsenic	0.72 :g/m ³ ^[2]			
Aluminum Metal & Oxide	138.70 :g/m ³ ^[2]			
Calcium Hydroxide	1,330.0 :g/m ³ ^[2]			
Chromium III Oxide as Cr	0.32 :g/m ³ ^[2]			
Copper Oxide as Cu	4.00 :g/m ³ ^[2]			
Iron II Oxide	244.1 :g/m ³ ^[2]			
Lead Oxide	6.86 :g/m ³ ^[2]			
Magnesium Oxide	11.1 :g/m ³ ^[2]			
Nickel	6.60 :g/m ³ ^[2]			
Polynuclear Aromatics (PAHs)	1.60 :g/m ³ ^[2]			
Polychlorinated Biphenyls (PCBs)	0.076 :g/m ³ ^[2]			
Zinc Oxide	2,573.70 :g/m ³ ^[2]			
Ammonia	50 ppmvd @ 12% CO ₂ ^[2] ; 10.21 lb/hr ^[2]			
Municipal Waste Combustor (MWC) Unit Load ^[5]	Less than or equal to: 110% of the maximum demonstrated MWC unit load, measured during the most recent performance test for dioxin/furan emissions for which compliance with the emissions limit was achieved	RCSA §22a-174-38(g)(2)	A.1.13	F
Final Particulate Matter (PM) Control Device Inlet Temperature	Less than or equal to: 17E centigrade above the maximum demonstrated PM control device temperature measured during the most recent performance test for dioxin/furan emissions for which compliance with the emissions limit was achieved	RCSA §22a-174-38(g)(1)	A.1.14	F

^[2] The instantaneous limits in lb/MMBTU, ppmvd, grains/dscf, :g/m³, %O₂, the combustion temperature, and the CO/CO₂ ratio shall not apply during periods of start-up, shutdown, or malfunction but the lb/hr limit shall apply at all times. The instantaneous limitations will take effect only during steady state, continuous burn operations when the incinerator/boiler is continuously, semi-continuously, or batch fed waste tires.

Section III: Applicable Requirements and Compliance Demonstration

^[5] Combustor Unit Load is the rate at which steam is produced in lb/hr or kg/hr.

A. EU-01, EU-02, & EU-12, INCINERATORS/BOILERS PLUS CALCINER

A.2. CEM REPORTING AND ENFORCEMENT MATRIX

TABLE III.A.2: EU-01, -02, -12, CEM REPORTING AND ENFORCEMENT MATRIX			
Pollutant or Process Parameter	Monitoring CEM Limit	Averaging Period	Monitoring, Record Keeping Reporting, & Testing Requirements
NO _x	Greater than: 21.99 lb/hr or 0.12 lb/MMBTU	24-hour block average	The Permittee shall maintain records of CEM data of all one-hour average NO _x emissions concentrations [RCSA §22a-174-38(k)(3)(D)] to be reviewed on a daily basis. The Permittee shall maintain records of all 24-hour daily arithmetic average NO _x emission concentrations [RCSA §22a-174-38(k)(4)(B)]. The Permittee shall report to the Commissioner within 3 working days any exceedance of the emissions limits [Permit Nos. 176-0001 & -0002].
	Greater than: 171.6 TPY	12-month rolling average to be calculated at the end of each calendar month	The Permittee shall report to the Commissioner any rolling annual emissions exceedances for any month during which the exceedance occurred [Permit Nos. 176-0001 & -0002].
SO ₂	Greater than: 19.68 lb/hr or 0.109 lb/MMBTU	24-hour geometric average of the hourly arithmetic averages	The Permittee shall maintain records of CEM data of all one-hour average SO ₂ emission concentrations [RCSA §22a-174-38(k)(3)(B)] emissions to be reviewed on a daily basis [Permit Nos. 176-0001 & -0002]. The Permittee shall maintain records of all one-hour average SO ₂ reduction efficiency levels [RCSA §22a-174-38(k)(3)(C)]. The Permittee shall maintain records of all 24-hour daily geometric average SO ₂ emission concentrations and all 24-hour daily geometric average percent reductions in SO ₂ [RCSA §22a-174-38(k)(4)(A)]. The Permittee shall report to the Commissioner within 3 working days any exceedance of the emissions limits [Permit Nos. 176-0001 & -0002 & RCSA §22a-174-38(ℓ)(6)].
	Greater than: 153.5 TPY	12-month rolling average to be calculated at the end of each calendar month	The Permittee shall report to the Commissioner any rolling annual emissions exceedances for any month during which the exceedance occurred [Permit Nos. 176-0001 & -0002].
CO ₂ ^[6]	None Specified	1-hour average	The Permittee shall maintain and review records on a daily basis [Permit Nos. 176-0001 & -0002 & RCSA §22a-174-38(ℓ)(6)].
Opacity	Greater than 10%	5 consecutive 6-minute block averages	The Permittee shall maintain and review records on a daily basis [Permit Nos. 176-0001 & -0002] of all six-minute arithmetic average opacity levels [RCSA §22a-174-38(k)(3)(A)]. The Permittee shall report within 3 working days any exceedance of the emissions limit [Permit Nos. 176-0001 & -0002 & RCSA §22a-174-38(ℓ)(6)].
	Greater than 40%	10 seconds	The Permittee shall report to the Commissioner within 3 working days any exceedance of the emissions limit [Permit Nos. 176-0001 & -0002].

Section III: Applicable Requirements and Compliance Demonstration

^{16]} O₂ or CO₂ content in flue gas shall be monitored at each location where CO, SO₂, and NO_x are monitored [RCSA §22a-174-38(j)(1)].

A. EU-01, EU-02, & EU-12, INCINERATORS/BOILERS PLUS CALCINER

A.2. CEM REPORTING AND ENFORCEMENT MATRIX

TABLE III.A.2: EU-01, -02, -12, CEM REPORTING AND ENFORCEMENT MATRIX			
Pollutant or Process Parameter	Monitoring CEM Limit	Averaging Period	Monitoring, Record Keeping, Reporting, and Testing Requirements
CO	Greater than: 30.2 lb/hr or 0.167 lb/MMBTU	4-hour block average	The Permittee shall maintain records of all one-hour CEM data of CO emissions concentrations [RCSA §22a-174-38(k)(3)(D)] to be reviewed on a daily basis [Permit Nos. 176-0001 & -0002]. The Permittee shall maintain records of CEM data of all 4-hour block average CO emissions concentrations [RCSA §22a-174-38(k)(4)(C)]. The Permittee shall report to the Commissioner within 3 working days any exceedance of the emissions limits [Permit Nos. 176-0001 & -0002 & RCSA §22a-174-38(ℓ)(6)].
	Greater than: 235.6 TPY	12-month rolling average to be calculated at the end of each calendar month	The Permittee shall report to the Commissioner any rolling annual emissions exceedances for any month during which the exceedance occurred [Permit Nos. 176-0001 & -0002].
Combustion Temperature	Less than or equal to: 1800 EF	1-hour block average	The Permittee shall maintain and review records on a daily basis [Permit Nos. 176-0001 & -0002]. The Permittee shall report to the Commissioner within 3 working days any exceedance of the emissions limit [Permit Nos. 176-0001 & -0002 & RCSA §22a-174-38(ℓ)(6)].
O ₂ ^{16]}	Less than or equal to: 3%	1-hour block average	The Permittee shall maintain and review records on a daily basis [Permit Nos. 176-0001 & -0002]. The Permittee shall report to the Commissioner within 3 working days any exceedance of the emissions limit [Permit Nos. 176-0001 & -0002 & RCSA §22a-174-38(ℓ)(6)].
Fuel Feed Rate	Greater than: 181 MMBTU/hr	8-hour block average	The Permittee shall report to the Commissioner any 8-hour shift the limit was exceeded during that shift [Permit Nos. 176-0001 & -0002].

^{16]} O₂ or CO₂ content in flue gas shall be monitored at each location where CO, SO₂, and NO_x are monitored [RCSA §22a-174-38(j)(1)].

Section III: Applicable Requirements and Compliance Demonstration

A. EU-01, EU-02, & EU-12, INCINERATORS/BOILERS PLUS CALCINER

A.2. CEM REPORTING AND ENFORCEMENT MATRIX

TABLE III.A.2: EU-01, -02, -12, CEM REPORTING AND ENFORCEMENT MATRIX			
Pollutant or Process Parameter	Monitoring CEM Limit	Averaging Period	Monitoring, Record Keeping, Reporting, and Testing
Combustion Efficiency (CO/CO ₂)	Less than or equal to: 99.8%	1-hour average	The Permittee shall maintain and review records of combustion efficiency on an hourly basis [Permit Nos. 176-0001 & -0002]: - If > 72 1-hour exceedances in a consecutive 30-day period, the Permittee shall submit an independent consultant report to the Commissioner. - If > 216 1-hour exceedances in a consecutive 90-day period, the Permittee shall submit an independent consultant report to the Commissioner and perform stack testing.
	99.5 %		If > 72 1-hour exceedances in a consecutive 90-day period, the Permittee shall submit an independent consultant report to the Commissioner and perform stack testing.
	99.0%		If > 3 1-hour consecutive exceedances, the Permittee shall shutdown the incinerators/boilers.
Final Particulate Matter (PM) Control Device Inlet Temperature	Greater than: 17E centigrade above the maximum demonstrated PM control device temperature measured during the most recent performance test for dioxin/furan emissions for which compliance with the emissions limit was achieved	4-hour block arithmetic average	The Permittee shall maintain records of CEM data of all one-hour average particulate matter control inlet temperatures and combustor unit loads [RCSA §22a-174-38(k)(3)(E)] to be reviewed on a daily basis. The Permittee shall maintain records of all 4-hour block arithmetic average inlet temperatures and combustor unit loads [RCSA §22a-174-38(k)(4)(D)].
Municipal Waste Combustor (MWC) Unit Load ^[5]	Greater than: 110% of the maximum demonstrated MWC unit load, measured during the most recent performance test for dioxin/furan emissions for which compliance with the emissions limit was achieved	4-hour block arithmetic average	The Permittee shall maintain records of CEM data of all one-hour average particulate matter control inlet temperatures and combustor unit loads [RCSA §22a-174-38(k)(3)(E)] to be reviewed on a daily basis. The Permittee shall maintain records of all 4-hour block arithmetic average inlet temperatures and combustor unit loads [RCSA §22a-174-38(k)(4)(D)].

^[5] Combustor Unit Load is the rate at which steam is produced in lb/hr or kg/hr.

Section III: Applicable Requirements and Compliance Demonstration

A. EU-01, EU-02, & EU-12, INCINERATORS/BOILERS PLUS CALCINER

A.3. COMPLIANCE DEMONSTRATION - GENERAL REQUIREMENTS

A.3.1. CEM Requirements:

- a. The Permittee shall comply with the CEM Reporting and Enforcement requirements for NO_x, SO_x, CO₂, CO, Opacity, Combustion Temperature, O₂, Fuel Feed Rate, and Combustion efficiency summarized in Table III.A.2 of this Title V operating permit at all times [Permit Nos. 176-0001 & -0002]. In addition to those pollutants and parameters listed in Table III.A.2 above, the following parameters shall also be monitored: **steam load, pressure drop across air pollution control equipment, lime injection rate in lb/hour, urea injection rate in gallon/hour, total combined over-fire and under-fire air, reagent stoichiometry, reagent application pressures and reagent flow rates** [Permit Nos. 176-0001 & -0002]. All CEM activities, including, but not limited to, calibration tests, averaging times, relative accuracy testing, and telemetry requirements shall be consistent with those specified in the Department's CEM guide dated August 19, 1996 [Permit Nos. 176-0001 & -0002 & 40 CFR 70.6(a)(3)(i)(B)].
- b. The Permittee shall comply with the following minimum CEM data requirements [RCSA §22a-174-38(j)(2)]:
 - i. Data available for gaseous and process CEMs shall not be less than ninety percent (90%) of the total operating hours in any one calendar quarter [RCSA §22a-174-38(j)(2)(A)];
 - ii. Data available for opacity CEMs shall not be less than ninety-five percent (95%) of the total operating hours in any one calendar quarter [RCSA §22a-174-38(j)(2)(B)];
 - iii. At least three equally spaced data points per hour shall be used to calculate a one-hour average [RCSA §22a-174-38(j)(2)(C)];
 - iv. The percentage of data available shall be calculated in accordance with the procedures specified on forms furnished or prescribed by the Commissioner [RCSA §22a-174-38(j)(2)(D)]; and
 - v. When correcting emission concentration values using the mean difference criteria evaluation specified in 40 CFR Part 60, Appendix B, Performance Specification 4A, the Permittee shall use the following equation [RCSA §22a-174-38(j)(3)]:

$$\text{Mean difference} = \frac{\sum d}{n} - + - cc - \# 5\text{ppm}$$

A.3.2. Record Keeping Requirements:

- a. Records specified in Table III.A.2 and in Subsections A.2 - A.4, Section III of this Title V operating permit shall be maintained and dated for the calendar month it was generated. Each record shall be maintained for at least five (5) years from the date the record was created [RCSA §§22a-174-38(k)(1), 22a-174-33(o)(2) & 40 CFR §70.6(a)(3)(ii)].
- b. The Permittee shall maintain records of calendar dates when any of the average emissions concentrations, percent reductions, operating parameters, or opacity levels exceed the allowable limits. The reasons for such exceedances, a description of corrective actions taken and a description of the measures taken to prevent future exceedances shall also be recorded [RCSA §22a-174-38(k)(5)].
- c. The Permittee shall maintain records of calendar dates for which the minimum number of hours of any of the data required by Table III.A.1 and Table III.A.2, Section III of this Title V operating permit have not been obtained shall be identified, the reasons for not obtaining sufficient data, a description of corrective actions taken and a description of the measures taken to prevent future losses of data [RCSA §22a-174-38(k)(6)].

Section III: Applicable Requirements and Compliance Demonstration

A. EU-01, EU-02, & EU-12, INCINERATORS/BOILERS PLUS CALCINER, CONTINUED

A.3. COMPLIANCE DEMONSTRATION - GENERAL REQUIREMENTS, CONTINUED

- d. Wherever the Permittee has excluded data from the calculation of average emissions concentrations or parameters for SO₂, NO_x, or operational parameters (CO, MWC load, particulate matter control device inlet temperature), then the Permittee shall identify such exclusion of data as well as the reasons for excluding the data [RCSA §22a-174-38(k)(7)].
- e. The Permittee shall record the results of daily calibrations and quarterly accuracy determinations for opacity, SO₂, NO_x, CO, and O₂ or CO₂ continuous emissions monitoring systems [RCSA §22a-174-38(k)(8)].
- f. The Permittee shall record the test reports and supporting calculations documenting the results of an **initial performance** test conducted to determine compliance with the emissions limits specified in this section for PM, opacity, cadmium, lead, mercury, dioxin/furan emissions, hydrogen chloride, and fugitive ash. The maximum demonstrated MWC unit load and maximum demonstrated particulate matter control device temperature shall be recorded for the initial performance test for dioxin/furan emissions for each particulate matter control device. The test results and supporting calculations documenting the relationship between CO₂ and O₂ shall be recorded if established during the initial performance test [RCSA §22a-174-38(k)(9)].
- g. The Permittee shall record the test reports and supporting calculations documenting the results of **all annual performance tests** conducted to determine compliance with the emission limits specified in this section for PM, opacity, cadmium, lead, mercury, dioxin/furan emissions, hydrogen chloride, and fugitive ash. The maximum demonstrated MWC unit load and maximum demonstrated particulate matter control device temperature shall be recorded for each performance test for dioxin/furan emissions for each particulate matter control device. The test results and supporting calculations documenting the relationship between CO₂ and O₂ shall be recorded if the relationship is re-established during the annual performance test [RCSA §22a-174-38(k)(10)].
- h. The Permittee shall maintain records of operator training and certification on an annual basis as follows [RCSA §22a-174-38(k)(2)]:
 - i. The names of the chief operators and shift operators, certified by the Commissioner, and employed at the plant, including the dates of initial and renewal certifications and documentation of current certification;
 - ii. The names of the chief operators and shift operators who have completed an operator training course; and
 - iii. The names of the persons at the plant who have completed the training program.

A.3.3. Reporting Requirements:

- a. The Permittee shall submit an initial performance test report to the Commissioner within sixty (60) days after the date of completion of the initial performance test. Such an initial test report shall include the following [RCSA §22a-174-38(l)(1)]:
 - i. The initial performance test data for SO₂, NO_x, CO, MWC unit load, and PM control device inlet temperature.
 - ii. The initial performance test data for PM, opacity, cadmium, lead, mercury, dioxin/furan, hydrogen chloride, and fugitive ash emissions. Dioxin/furan emissions shall be reported in the following units: nanograms per dry standard cubic meters (0g/dscm) total mass, corrected to 7% O₂ or equivalent % CO₂, and picograms per dry standard cubic meter, corrected to 12% CO₂ using 32 degrees Fahrenheit and 29.92 inches of Hg (mercury) as normal conditions, using the Toxic Equivalency Factors specified in RCSA §22a-174-1(22).

Section III: Applicable Requirements and Compliance Demonstration

A. EU-01, EU-02, & EU-12, INCINERATORS/BOILERS PLUS CALCINER, CONTINUED

A.3. COMPLIANCE DEMONSTRATION - GENERAL REQUIREMENTS, CONTINUED

- iii. The performance evaluation for the CEM system using the applicable performance specifications cited in Subsections A.3 (combustor specific) and A.4 (pollutant specific), Section III, of this Title V operating permit (or RCSA §22a-174-38(j)).
- iv. The maximum demonstrated MWC unit load and maximum demonstrated PM control device inlet temperatures established during the initial dioxin/furan performance test.
- v. For units for which the relationship between CO₂ and O₂ is established, the Permittee shall submit the results of the tests establishing the relationship, including test results, identification of the unit test, the data and time of each test run, and, as necessary, a schedule for making the appropriate modifications to the CEM system to incorporate the equivalent % CO₂ correction factor.
- b. The Permittee shall submit a quarterly report to the Commissioner within thirty (30) days following the end of each calendar quarter in which the data were collected. The first quarterly report shall be submitted within thirty (30) days following the end of the calendar quarter in which the initial performance test is conducted. Each quarterly report shall include the following [RCSA §22a-174-38(ℓ)(2)]:
 - i. All emissions data recorded pursuant to Table III.A.2, Section III, of this Title V operating permit during the calendar quarter;
 - ii. Each calendar date during the calendar quarter reported when any of the average emission concentrations, percent reductions, operating parameter or opacity levels recorded exceeded the applicable limit identified in this section; the reasons the limit was exceeded and a description of the corrective actions taken.
 - iii. The data and results of any CEM quality assurance testing conducted.
- c. The Permittee shall submit an annual report to the Commissioner no later than January 30 of each year following the calendar year in which the data were collected. The first annual report shall be submitted no later than January 30 of the first year following the end of the calendar year in which the initial performance test is conducted. Each annual report shall include the following: A summary of data collected for each pollutant regulated under RCSA §22a-174-38 (listed in Table III.A.1) as follows [RCSA §22a-174-38(ℓ)(3)]:
 - i. A list of the PM, opacity, cadmium, lead, mercury, dioxin/furan, hydrogen chloride, and fugitive ash emission levels achieved during all initial and annual performance tests.
 - ii. A list of the highest emission level recorded for SO₂, NO_x, CO, MWC unit load, and PM control device inlet temperature based on the data recorded for 24-hour daily geometric averages, 24-hour averages, or 4-hour block arithmetic averages, as applicable.
 - iii. The highest six-minute average opacity level measured.
 - iv. The relationship between CO₂ and O₂ if such relationship is re-established, including test results, identification of the units tested and the date and time of each test run, and as necessary, a schedule for making the appropriate modifications to the CEM system to incorporate the equivalent % CO₂ correction factor.
 - v. The total number of days that the minimum number of hours of data for SO₂, NO_x, CO, MWC unit load, and PM control device inlet temperature data were not obtained.
 - vi. The total number of hours that data for SO₂, NO_x, CO, MWC unit load, and PM control device inlet temperature were excluded from the calculation of average emission concentrations or parameters.
 - vii. The information required in this subsection (Subsection A.3.3, Section III), compliance items c.i', 'c.ii', and 'c.iii' (above), in this Title V operating permit for the previous calendar year.

Section III: Applicable Requirements and Compliance Demonstration

A. EU-01, EU-02, & EU-12, INCINERATORS/BOILERS PLUS CALCINER, CONTINUED

A.3. COMPLIANCE DEMONSTRATION - GENERAL REQUIREMENTS, CONTINUED

- viii. The total number of days that the minimum number of hours of data for SO₂, NO_x, CO, MWC unit load, and PM control device inlet temperature data were not obtained.
- ix. The total number of hours that data for SO₂, NO_x, CO, MWC unit load, and PM control device inlet temperature were excluded from the calculation of average emission concentrations or parameters.
- x. The information required in this subsection (Subsection A.3.3, Section III), compliance items c.i', 'c.ii', and 'c.iii' (above), in this Title V operating permit for the previous calendar year.
- xi. The data summaries required by compliance item 'c' (above), Subsection A.3.3, Section III, shall highlight any emissions or parameter levels that did not achieve the emissions or parameter limits specified in Table III.A.1 & Table III.A.2 (or RCSA §22a-174-38(c)).
- d. The Permittee, at least ninety (90) days prior to conducting any performance test, shall submit a performance test plan for review and written approval of the Commissioner. Such plan shall contain, at a minimum, the following information [RCSA §22a-174-38(ℓ)(4)]:
 - i. Sampling locations;
 - ii. Test methods;
 - iii. Sampling protocols;
 - iv. Sample analysis procedures; and
 - v. Any other information required by the Commissioner.
- e. The Permittee shall provide written notification to the Commissioner three (3) business days prior to conducting any performance test required [RCSA §22a-174-38(ℓ)(5)].
- f. The Permittee shall provide written notification to the Commissioner within seventy-two (72) hours of the time at which the Permittee receives information regarding performance test results indicating that any PM, opacity, cadmium, lead, mercury, dioxin/furan, hydrogen chloride, or fugitive ash emissions levels exceed the applicable pollutant emission limits or standards defined in Section III.A, Table III.A.1 and RCSA §22a-174-38(c) [RCSA §22a-174-38(ℓ)(6)]. (Note: any violations which pose an imminent and substantial danger to public health, safety, or the environment shall be reported no later than 24 hours after the Permittee learns, or in the exercise of reasonable care should have learned, of such violation in accordance with RCSA §22a-174-33(p)(1)(A)).
- g. The Permittee shall include a certification signed by a responsible corporate officer or a duly authorized representative of such officer such as those defined in RCSA §22a-430-3(b)(2) and by the individual or individuals responsible for actually preparing such document, each of whom shall examine and be familiar with the information submitted in the document and all attachments thereto, and shall make inquiry of those individuals responsible for obtaining the information to determine that the information is true, accurate, and complete, and each of whom shall certify in writing as follows [RCSA §22a-174-38(ℓ)(7)]:

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate, and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under CGS §22a-175, or, in accordance with CGS §§22a-6, 53a-157b, and in accordance with any other applicable statute."

Section III: Applicable Requirements and Compliance Demonstration

A. EU-01, EU-02, & EU-12, INCINERATORS/BOILERS PLUS CALCINER, CONTINUED

A.3. COMPLIANCE DEMONSTRATION - GENERAL REQUIREMENTS, CONTINUED

- h.** The Permittee shall submit all reports and notifications required by Subsections A.2 - A.4, Section III, of this Title V operating permit (RCSA §22a-174-38) on forms furnished or prescribed by the Commissioner [RCSA §22a-174-38(ℓ)(8)].
- i.** The Permittee shall submit all reports specified in Subsections A.2 - A.4, Section III, of this Title V operating permit as a paper copy, with supporting data in either paper or electronic format, postmarked on or before the submittal dates specified in Subsections A.2 and A.3.3, Section III, of this Title V operating permit and maintain such reports at the premises as a paper copy with any supporting data in the format submitted for a period of five (5) years from the date of submission to the Commissioner [RCSA §22a-174-38(ℓ)(9)].

A.3.4. Quality Assurance Plan:

The Permittee shall comply with the Quality Assurance Plan approved by the Department which proposed equipment specifications, calibration, and operating procedures necessary to monitor these parameters to permit the optimum operation and maintenance of this equipment and to provide a continuous indication of compliance [Permit Nos. 176-0001 & -0002].

A.3.5. Exceedances and Deviations:

- a.** Should an exceedance or deviation from any permitted limit or parameter occur, then the Permittee shall notify the Commissioner within 3-working days of such incident. The Permittee shall report the exceedance or deviation via the Department's dedicated phone line with the following information: date and time of exceedance or deviation, magnitude of exceedance, applicable averaging period associated with the exceedance, corrective actions taken, measures taken to prevent further exceedances for the applicable parameter. The Permittee shall review each notification by using the appropriate options in the voice mail system. The Permittee shall keep phone records for written confirmation that notifications were made as required [Permit Nos. 176-0001 & -0002].
- b.** The Permittee shall submit to the Commissioner written monitoring reports on a semi-annual basis [RCSA §22a-174-33(o)(1)]. Such report shall contain the following:
 - i.** The date and description of each deviation caused by upset or control equipment deficiencies, each deviation from a permit requirement, and each violation of a Title V operating permit requirement that has been monitored by the monitoring systems required under the Title V operating permit, which has occurred since the date of the last monitoring report; and
 - ii.** The date and description of each occurrence of a failure of the monitoring system to provide reliable data.
- c.** Any monitoring report the Permittee submits to the Commissioner shall be certified in accordance with RCSA §22a-174-33(b)(4) [RCSA §22a-174-33(o)(2)].
- d.** Violations which pose an imminent and substantial danger to public health, safety, or the environment shall be reported no later than 24 hours after the Permittee learns, or in the exercise of reasonable care should have learned, of such violation in accordance with RCSA §22a-174-33(p)(1)(A).

Section III: Applicable Requirements and Compliance Demonstration

A. EU-01, EU-02, & EU-12, INCINERATORS/BOILERS PLUS CALCINER, CONTINUED

A.3. COMPLIANCE DEMONSTRATION - GENERAL REQUIREMENTS, CONTINUED

A.3.6. Stack Testing:

- a. The Permittee shall conduct an initial performance test to determine compliance with the emissions limits specified in Table III.A.1, Section III, of this Title V operating permit. All performance tests shall be conducted under representative full load operating conditions. The initial performance test for NO_x, SO₂, PM, opacity, CO, cadmium, hydrogen chloride, lead, mercury, and dioxin/furan shall be completed within 180 days after the final compliance date, December 19, 2000 [RCSA §22a-174-38(i)(1)].
- b. The Permittee shall perform stack testing for dioxin/furan, particulate matter, hydrogen chloride, cadmium, lead, and mercury on an annual basis no more than twelve (12) calendar months following the previous or initial performance test [RCSA §22a-174-38(i)(2)].
- c. The Permittee shall perform stack testing within four years from date of issuance of this Title V operating permit for VOC, H₂SO₄, arsenic, aluminum metal and oxide, calcium hydroxide, chromium III oxide, copper oxide, iron II oxide, lead oxide, magnesium oxide, nickel, polynuclear aromatics (PAHs), polychlorinated biphenyls (PCBs), zinc oxide, and ammonia. Compliance testing (other than initial performance testing) may not be required for pollutants requiring CEM (NO_x, SO_x, CO₂, CO, opacity, combustion temperature, O₂, fuel feed rate, and combustion efficiency). The Department reserves the right to require stack testing of any pollutant at any time to demonstrate compliance [RCSA §22a-174-5(e)].
- d. Should the Permittee demonstrate for two (2) consecutive years that the dioxin/furan emissions levels from all units at the premises are less than 0.0557 0g/dscm total mass, then the Permittee shall only be required to conduct performance testing for dioxin/furan on one unit at the premises.
The Permittee shall rotate performance testing among units no more than twelve months following the previous performance test in a fixed sequence so that each unit is tested at the same frequency [RCSA §22a-174-38(i)(3)].
- e. **CO₂:O₂ Relationship:** If testing for the relationship between CO₂ and O₂, the Permittee shall test in accordance with the following procedures: At least three (3) test runs of CO₂ and O₂ diluent data shall be obtained using the procedures and methods contained in 40 CFR Part 60, Appendix A, Reference Method 3A or 3B [RCSA §22a-174-38(i)(4)(J)(i)]. For each test run, using the following equation, a calculation shall be made of the CO₂ correction factor which is equivalent to a 7% correction factor [RCSA §22a-174-38(i)(4)(J)(ii)]:

$$\text{CO}_2 \text{ correction factor} = \frac{13.9 \times \text{CO}_2 \text{ measured}}{(20.9 - \text{O}_2 \text{ measured})}$$

Calculation of a unit-specific equivalent CO₂ correction factor shall be the arithmetic mean of the result obtained from the three (3) test runs and the calculation of the CO₂ correction factor for each test run rounded to the nearest whole number [RCSA §22a-174-38(i)(4)(J)(iii)].

Section III: Applicable Requirements and Compliance Demonstration

A. EU-01, EU-02, & EU-12, INCINERATORS/BOILERS PLUS CALCINER

A.3. COMPLIANCE DEMONSTRATION - GENERAL REQUIREMENTS, CONTINUED

A.3.7. Operating Practices:

- a. The Permittee shall not cause or allow the MWC unit to operate at a temperature, measured at each particulate control device inlet, more than seventeen (17) degrees centigrade, based on a 4-hour arithmetic average, above the maximum demonstrated particulate control device temperature measured during the most recent performance test for dioxin/furan emissions for which compliance with the dioxin/furan emissions limit was achieved [RCSA §22a-174-38(g)(1)].
- b. The Permittee shall not cause or allow the MWC unit to operate at a MWC unit load greater than one hundred ten percent (110%) of the maximum demonstrated 4-hour average MWC unit load, based on a 4-hour arithmetic average, measured during the most recent performance test for dioxin/furan emissions for which compliance with the dioxin furan emissions limit was achieved [RCSA §22a-174-38(g)(2)]. The MWC unit load shall be measured by a steam flow meter [RCSA §22a-174-38(g)(2)].
- c. The Permittee may, during the annual dioxin/furan emissions performance test and for two (2) weeks prior to such test, allow temperatures in excess of that specified in compliance condition 'a' (above), Subsection A.3.7, Section III and MWC unit load limits in excess of that specified in compliance condition 'b' (above), Subsection A.3.7, Section III. However, should the Permittee operate the unit at such excess temperatures and load, the Permittee shall not again be allowed to operate at such excess temperatures and load during that test period without the approval of the Commissioner should the annual dioxin/furan emission performance test be postponed [RCSA §22a-174-38(g)(3)].
- d. The PM control device temperature limits and the MWC unit load limit may be waived temporarily by the Commissioner to allow evaluation of system performance, testing of new technology, or control technologies, or diagnostic testing, provided that any such temporary waiver is authorized through a permit or order issued prior to an evaluation of system performance, testing of new technology, or control technologies or diagnostic testing [RCSA §22a-174-38(g)(4)].

A.3.8. Operator Training and Certification:

- a. The Permittee shall not allow the MWC units to be operated at any time unless a certified chief operator or shift operator is physically present at the premises [RCSA §22a-174-38(h)(1)].
- b. The operators shall be certified by the Commissioner under RCSA §22a-231-1 and shall be identified as either a Class I or Class II chief operator or a Class I or Class II shift operator [RCSA §22a-174-38(h)(2)].
- c. All chief operators and shift operators must satisfactorily complete an operator training course conducted by the commissioner no later than 180 days following the effective date of RCSA §22a-174-38. Chief operators and shift operators hired after the effective date of RCSA §22a-174-38 shall satisfactorily complete such course within six months of date of employment [RCSA §22a-174-38(h)(3)].
- d. No later than one year after the effective date of RCSA §22a-174-38, the Permittee shall develop a site-specific Municipal Waste Combustor Operating & Maintenance Manual with an index or revise an existing operating and maintenance manual. Such manual shall be updated on an annual basis and containing the following elements [RCSA §22a-174-38(h)(4)]:

Section III: Applicable Requirements and Compliance Demonstration

A. EU-01, EU-02, & EU-12, INCINERATORS/BOILERS PLUS CALCINER, CONTINUED

A.3. COMPLIANCE DEMONSTRATION - GENERAL REQUIREMENTS, CONTINUED

- i. A summary of the applicable emissions limits and operational requirements;
 - ii. A description of basic combustion theory applicable to a municipal waste combustor unit;
 - iii. Procedures for receiving, handling, and feeding tires;
 - iv. Procedures for startup, shutdown, and malfunction;
 - v. Procedures for maintaining proper combustion air supply levels;
 - vi. Procedures for operating the combustor within the emissions standards for NO_x, SO₂, PM, opacity, CO, cadmium, hydrogen chloride, lead, mercury, and dioxin/furan;
 - vii. Procedures for responding to periodic upset or off-specification conditions;
 - viii. Procedures for minimizing particulate matter carryover;
 - ix. Procedures for handling ash;
 - x. Procedures for monitoring emissions; and
 - xi. Procedures for reporting and record keeping.
- e. The Permittee shall establish a training program to review the MWC Operating & Maintenance Manual with each person who has responsibilities affecting the operation of the MWC units including but not limited to, the chief operator, shift operator, ash handler, maintenance employee, and crane/load handler. The Permittee shall train new employees prior to each new employee's assumption of any responsibilities for the MWC. The Permittee shall train those who presently are employed within one year after the effective date of RCSA §22a-174-38. Following initial training, the training program shall be repeated on an annual basis for each person [RCSA §22a-174-38(h)(5)].
- f. The Operating & Maintenance Manual shall be kept in a location readily accessible to all persons and shall be available for inspection by the Commissioner or Administrator upon request [RCSA §22a-174-38(h)(6)].

A.4. COMPLIANCE DEMONSTRATION - POLLUTANT SPECIFIC

1. **NO_x:** Emissions of NO_x shall not exceed those limits stated in Condition A.1.1, Table III.A.1 of this Title V operating permit. Demonstration of compliance shall be based on but not limited to CEM data. Refer to Table III.A.2 of this Title V operating permit for CEM requirements. Additional requirements are as follows:

Monitoring and Testing Requirements

NO_x monitors shall meet the applicable performance and quality assurance requirements of 40 CFR Part 60, Appendix B, Performance Specification 2; 40 CFR Part 60, Appendix F, Procedure 1; and 40 CFR §60.13 [RCSA §22a-174-38(j)(1)(D)].

2. **SO_x:** Emissions of SO_x shall not exceed those limits stated in Condition A.1.2, Table III.A.1 of this Title V operating permit. Demonstration of compliance shall be based on but not limited to CEM data. Refer to Table III.A.2 of this Title V operating permit for CEM requirements. Additional requirements are as follows:

Monitoring and Testing Requirements

- i. The Permittee shall monitor records of fuel merchant certifications from the fuel supplier certifying the type of fuel, the weight percent of sulfur in the fuel, name of fuel supplier, and the method used to determine the sulfur content of fuel for each shipment [RCSA §22a-174-19(a)(5)].

Section III: Applicable Requirements and Compliance Demonstration

A. EU-01, EU-02, & EU-12, INCINERATORS/BOILERS PLUS CALCINER, CONTINUED

A.4. COMPLIANCE DEMONSTRATION - POLLUTANT SPECIFIC, CONTINUED

- ii. SO₂ monitors shall meet the applicable performance and quality assurance requirements of 40 CFR Part 60, Appendix B, Performance Specification 2; 40 CFR Part 60, Appendix F, Procedure 1; and 40 CFR §60.13 [RCSA §22a-174-38(j)(1)(C)].

b. Record Keeping Requirements

The Permittee shall maintain records of fuel merchant certifications from the fuel supplier certifying the type of fuel, the weight percent of sulfur in the fuel, name of fuel supplier, and the method used to determine the sulfur content of fuel for each shipment [RCSA §22a-174-19(a)(5)].

- 3. **TSP (PM):** Emissions of particulate matter shall not exceed those limits stated in Condition A.1.3, Table III.A.1 of this Title V operating permit. Demonstration of compliance shall be based on the following requirements:

a. Monitoring and Testing Requirements

- i. The Permittee shall verify compliance with emissions rates from Table III.A.1 of this Title V operating permit on a semi-annual basis [RCSA §22a-174-33(o)(1)]. The Permittee shall demonstrate compliance by: maintaining good operational practices; meeting the CEM limitations for NO_x, combustion efficiency, SO₂, opacity, combustion temperature, operating hours, and oxygen content in flue gas; and by maintaining the ESP and fabric filter efficiencies [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].
- ii. The Permittee shall perform stack testing no more than twelve (12) calendar months following the previous performance test [RCSA §22a-174-38(i)(2)]. Emissions shall be measured using the arithmetic average of three 1-hour Method 5 (in Title 40 CFR Part 60) stack tests [RCSA §22a-174-5(b)(5) & 22a-174-38(i)(4)(A)(v)]. The minimum sample volume shall be 1.7 cubic meters. The probe and filter holder heating systems in the sample train shall be set to provide a gas temperature no greater than 160 +/- 14 degrees centigrade. An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 5 test run for particulate matter required [RCSA §22a-174-38(i)(4)(A)(iii)].
- iii. The Permittee shall select sampling site and number of traverse points for particulate matter testing in accordance with Reference Method No. 1, 40 CFR Part 60, Appendix A [RCSA §22a-174-38(i)(4)(A)(i)].
- iv. The Permittee shall conduct flue gas analysis for particulate matter testing using Reference Method 3, 40 CFR Part 60, Appendix A [RCSA §22a-174-38(i)(4)(A)(ii)].
- v. The Permittee shall install CEM equipment for PM₁₀/TSP when such CEM equipment acceptable to the Commissioner becomes commercially available. Upon receipt of written notice from the Commissioner that such CEM is required, the Permittee shall install, maintain and operate the equipment as specified by the Commissioner. The Permittee shall ensure all CEM monitoring and recording meet US EPA performance specifications set forth in 40 CFR Part 52, Appendix E [Permit Nos. 176-0001 & -0002].

b. Record Keeping Requirements

The Permittee shall maintain records of operating parameters listed in compliance item 'a.i' (above), Subsection A.4.3, Section III, of this Title V operating permit on a daily basis [Permit Nos. 176-0001 & -0002].

Section III: Applicable Requirements and Compliance Demonstration

A. EU-01, EU-02, & EU-12, INCINERATORS/BOILERS PLUS CALCINER, CONTINUED

A.4. COMPLIANCE DEMONSTRATION - POLLUTANT SPECIFIC, CONTINUED

c. Corrective Actions

- i. In the event TSP emissions exceed the limit stated in Condition A.1.3, Table III.A.1, then the Permittee shall take immediate corrective action to re-attain compliance with the limit [Permit Nos. 176-0001 & -0002].
 - ii. In the event that TSP emissions exceed 0.010 gr/dscf @12% CO₂ but are less than 0.020 gr/dscf then the Permittee shall have an independent consulting firm perform an engineering evaluation identifying a solution to such non-compliance condition. The Permittee shall submit the results of this evaluation to the Commissioner within 60 days with an Intent-to-Test (ITT) form for a re-test plan [Permit Nos. 176-0001 & -0002].
 - iii. Should TSP emissions reach or exceed 0.020 gr/dscf @ 12% CO₂, then the Permittee shall cease operating the equipment immediately and shall notify the Commissioner. The Permittee shall be allowed to start-up the equipment only after the Commissioner has been convinced that corrective action has been taken. Upon restarting operation under this circumstance, the Permittee shall demonstrate compliance with the TSP emissions limit to the Commissioner's satisfaction [Permit Nos. 176-0001 & -0002].
4. **Opacity:** Opacity shall not exceed those limits in Condition A.1.4, Table III.A.1, of this Title V operating permit. Demonstration of compliance shall be based on but not limited to CEM data. Refer to Table III.A.2 of this Title V operating permit for CEM requirements. Additional requirements are as follows:

Monitoring and Testing Requirements

The Permittee shall ensure opacity monitors meet the applicable performance and quality assurance requirements of 40 CFR Part 60, Appendix B, Performance Specification 1; RCSA §22a-174-4; and 40 CFR §60.13 [RCSA §22a-174-38(j)(1)(A)].

5. **CO:** Emissions of CO shall not exceed those limits stated in Condition A.1.5, Table III.A.1 of this Title V operating permit. Demonstration of compliance shall be based on but not limited to CEM data. Refer to Table III.A.2 of this Title V operating permit for CEM requirements. Additional requirements are as follows:

Monitoring and Testing Requirements

CO monitors shall meet the applicable performance and quality assurance requirements of 40 CFR Part 60, Appendix B, Performance Specification 4 or 4A (as applicable); 40 CFR Part 60, Appendix F, Procedure 1; and 40 CFR §60.13 [RCSA §22a-174-38(j)(1)(E)].

6. **VOC:** Emissions of VOC shall not exceed those limits stated in Condition A.1.6, Table III.A.1 of this Title V operating permit. Demonstration of compliance shall be based on the following requirements:

a. Monitoring and Testing Requirements

- i. The Permittee shall verify compliance with emissions rates from Table III.A.1 of this Title V operating permit on a semi-annual basis [RCSA §22a-174-33(o)(1)]. The Permittee shall demonstrate compliance by maintaining good operational practices and meeting the CEM limitations for NO_x, combustion efficiency, SO₂, opacity, combustion temperature, operating hours, and oxygen content in flue gas [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].

Section III: Applicable Requirements and Compliance Demonstration

A. EU-01, EU-02, & EU-12, INCINERATORS/BOILERS PLUS CALCINER, CONTINUED

A.4. COMPLIANCE DEMONSTRATION - POLLUTANT SPECIFIC, CONTINUED

- ii. The Permittee shall ensure testing for VOC emissions shall be conducted in a manner approved by the Commissioner [RCSA §22a-174-5(b)(6)] within 4 years from the date of issuance of this Title V operating permit [RCSA §22a-174-5(e)].
- iii. The Permittee shall install CEM equipment for VOC when such CEM equipment acceptable to the Commissioner becomes commercially available. Upon receipt of written notice from the Commissioner that such CEM is required, the Permittee shall install, maintain and operate the equipment as specified by the Commissioner. The Permittee shall ensure that all CEM monitoring and recording shall meet US EPA performance specifications set forth in 40 CFR Part 52, Appendix E [Permit Nos. 176-0001 & -0002].

b. Record Keeping Requirements

The Permittee shall maintain records of all CEM data on a daily basis [Permit Nos. 176-0001 & -0002].

7. **Combustion Temperature:** The Permittee shall maintain combustion temperature at a temperature greater than the minimum temperature specified in Condition A.1.7, Table III.A.1 of this Title V operating permit whenever tires are in the firebox. The Permittee shall demonstrate compliance using CEM data from all combustion chambers. Refer to Table III.A.2 of this Title V operating permit for CEM requirements.
8. **O₂:** Minimum oxygen content in flue gas shall not drop below the limit stated in Condition A.1.8, Table III.A.1 of this Title V operating permit. Demonstration of compliance shall be based on CEM. Refer to Table III.A.2 of this Title V operating permit for CEM requirements.
9. **CO/CO₂ (Combustion Efficiency):** Combustion efficiency ratio shall not exceed the limit stated in Condition A.1.9, Table III.A.1 of this Title V operating permit. Demonstration of compliance shall be based on but not limited to CEM data. Refer to Table III.A.2 of this Title V operating permit for CEM requirements.
10. **Fuel Feed Rate:** The fuel feed rate shall not exceed the limit stated in Condition A.1.10, Table III.A.1 of this Title V operating permit. Demonstration of compliance shall be based on but not limited to CEM data. Refer to Table III.A.2 of this Title V operating permit for CEM requirements.
11. **Fugitive Ash:** Visible emissions from fugitive ash shall not exceed the limit stated in Condition A.1.11, Table III.A.1 of this Title V operating permit. Demonstration of compliance shall be based on the following requirements:
 - a. Monitoring and Testing Requirements
 - i. The Permittee shall demonstrate compliance by maintaining good operational practices and maintenance of the ash conveying system [RCSA §22a-174-33(j)(1)(K) & 40 CFR §70.6(a)(3)(i)(B)].
 - ii. The Permittee shall perform stack testing no more than 12 calendar months following the previous performance test [RCSA §22a-174-38(i)(2)]. The Permittee shall determine fugitive ash emissions using Reference Method 22, Title 40 CFR Part 60, Appendix A [RCSA §22a-174-38(i)(4)(I)(i)]. The Permittee shall at a minimum make a series of three

Section III: Applicable Requirements and Compliance Demonstration

A. EU-01, EU-02, & EU-12, INCINERATORS/BOILERS PLUS CALCINER, CONTINUED

A.4. COMPLIANCE DEMONSTRATION - POLLUTANT SPECIFIC, CONTINUED

(3) one-hour observations. The observation period shall include representative operational times when the premises is transferring ash from the MWC unit to the area where ash is stored or loaded into containers or trucks [RCSA 22a-174-38(i)(4)(I)(ii) & -38(i)(4)(I)(iii)].

- iii. During maintenance and repair of the ash conveying systems, the Permittee shall take all reasonable measures to control fugitive emissions [RCSA 22a-174-38(f)(3)].

b. Record Keeping Requirements

The Permittee shall maintain records of all monitoring, maintenance, and test data specified in compliance condition 'a', Subsection A.4.11 (above), Section III, of this Title V operating permit [RCSA 22a-174-33(j)(1)(K) & 40 CFR 70.6(a)(3)(i)(B)].

12. **HAPs:** Emissions of HAPs shall not exceed those respective limits stated in Condition A.1.12, Table III.A.1 of this Title V operating permit. Demonstration of compliance shall be based on the following requirements:

a. Monitoring and Testing Requirements

- i. The Permittee shall verify compliance with emissions rates from Condition A.1.12, Table III.A.1 of this Title V operating permit on a semi-annual basis [RCSA 22a-174-33(o)(1)]. The Permittee shall demonstrate compliance by maintaining good operational practices and meeting the CEM limitations for NO_x, combustion efficiency, SO₂, opacity, combustion temperature, operating hours, and oxygen content in flue gas [RCSA 22a-174-33(j)(1)(K) & 40 CFR 70.6(a)(3)(i)(B)].
- ii. **H₂SO₄:** The Permittee shall install CEM equipment for H₂SO₄ when such CEM equipment acceptable to the Commissioner becomes commercially available. Upon receipt of written notice from the Commissioner that such CEM is required, the Permittee shall install, maintain and operate the equipment as specified by the Commissioner. The Permittee shall ensure all CEM monitoring and recording meet US EPA performance specifications set forth in 40 CFR Part 52, Appendix E [Permit Nos. 176-0001 & -0002].
- iii. **Cadmium and Lead:** The Permittee shall conduct stack testing no more than 12 calendar months following the previous performance test [RCSA 22a-174-38(i)(2)]. The Permittee shall measure emissions using Reference Method 29, Title 40 CFR Part 60, Appendix A [RCSA 22a-174-38(i)(4)(B)(iii)]. The Permittee shall use Reference Method 1, 40 CFR Part 60, Appendix A for determining the location and number of sampling points [RCSA 22a-174-38(i)(4)(B)(i)]. The Permittee shall use Reference Method 3 for flue gas analysis [RCSA 22a-174-38(i)(4)(B)(ii)]. The Permittee shall obtain simultaneously with each Method 29 test run an oxygen or carbon dioxide measurement [RCSA 22a-174-38(i)(4)(B)(iv)]. The minimum sample time shall be two (2) hours per each Method 29 test run [RCSA 22a-174-38(i)(4)(B)(v)]. The compliance determinations shall be based on an arithmetic average determined using all data generated in three (3) test runs as required by this section [RCSA 22a-174-38(i)(4)(B)(vi)].
- iv. **Mercury:** The Permittee shall conduct stack testing no more than 12 calendar months following the previous performance test [RCSA 22a-174-38(i)(2)]. The Permittee shall measure emissions using Reference Method 29, Title 40 CFR Part 60, Appendix A [RCSA

Section III: Applicable Requirements and Compliance Demonstration

§22a-174-38(i)(4)(C)(iii)]. The Permittee shall use Reference Method 1, 40 CFR Part 60,

A. EU-01, EU-02, & EU-12, INCINERATORS/BOILERS PLUS CALCINER, CONTINUED

A.4. COMPLIANCE DEMONSTRATION - POLLUTANT SPECIFIC, CONTINUED

Appendix A for determining the location and number of sampling points [RCSA §22a-174-38(i)(4)(C)(i)]. The Permittee shall use Reference Method 3 for flue gas analysis [RCSA §22a-174-38(i)(4)(C)(ii)]. The Permittee shall obtain simultaneously with each Method 29 test run an oxygen or carbon dioxide measurement [RCSA §22a-174-38(i)(4)(C)(iii)]. The minimum sample time shall be two (2) hours per each Method 29 test run [RCSA §22a-174-38(i)(4)(C)(iv)]. The compliance determinations shall be based on an arithmetic average determined using all data generated in three (3) test runs as required by this section [RCSA §22a-174-38(i)(4)(C)(vi)]. The percent reduction in the potential mercury emissions (%P_{Hg}) is computed using the following equation:

$$\%P_{Hg} = \left| \frac{E_i - E_o}{E_i} \right| \times 100\%$$

Where,

% P_{Hg} = Percent reduction of the potential mercury emissions achieved

E_i = Potential mercury emissions concentration measured at the control device inlet, corrected to 7% O₂ dry basis.

E_o = Controlled mercury emission concentration measured at the control device outlet, corrected to 7% O₂ dry basis.

- v. **Hydrogen Chloride:** The Permittee shall conduct stack testing no more than 12 calendar months following the previous performance test [RCSA §22a-174-38(i)(2)]. The Permittee shall measure emissions using Reference Method 26 or Method 26A, Title 40 CFR Part 60, Appendix A [RCSA §22a-174-38(i)(4)(G)(i)]. The minimum sampling time for Method 26 shall be one (1) hour [RCSA §22a-174-38(i)(4)(G)(i)]. The Permittee shall obtain simultaneously with each Method 26 test run an oxygen or carbon dioxide measurement [RCSA §22a-174-38(i)(4)(G)(ii)]. The compliance determinations shall be based on an arithmetic average determined using all data generated in three (3) test runs as required by this section [RCSA §22a-174-38(i)(4)(G)(iv)]. The percent reduction in potential hydrogen chloride emissions (%P_{HCl}) shall be computed using the following equation:

$$\%P_{HCl} = \left| \frac{E_i - E_o}{E_i} \right| \times 100\%$$

Where,

% P_{HCl} = Percent reduction of the potential hydrogen chloride emissions achieved.

E_i = Potential hydrogen chloride emissions concentration measured at the control device inlet, corrected to 7% O₂ dry basis.

E_o = Controlled hydrogen chloride emission concentration measured at the control device outlet, corrected to 7% O₂ dry basis.

Section III: Applicable Requirements and Compliance Demonstration

A. EU-01, EU-02, & EU-12, INCINERATORS/BOILERS PLUS CALCINER, CONTINUED

A.4. COMPLIANCE DEMONSTRATION - POLLUTANT SPECIFIC, CONTINUED

- vi. **Dioxin/Furan:** The Permittee shall conduct stack testing no more than 12 calendar months following the previous performance test [RCSA §22a-174-38(i)(2)]. The Permittee shall measure emission concentration using Reference Method 23, Title 40 CFR Part 60, Appendix A [RCSA §22a-174-38(i)(4)(H)(iii)]. The Permittee shall use Reference Method 1, 40 CFR Part 60, Appendix A for determining the location and number of sampling points [RCSA §22a-174-38(i)(4)(H)(i)]. The Permittee shall use Reference Method 3 for flue gas analysis [RCSA §22a-174-38(i)(4)(H)(ii)]. The Permittee shall obtain simultaneously with each Method 23 test run an oxygen or carbon dioxide measurement [RCSA §22a-174-38(i)(4)(H)(v)]. The minimum sample time shall be four (4) hours per each Method 23 test run [RCSA §22a-174-38(i)(4)(H)(iv)]. The compliance determinations shall be based on an arithmetic average determined using all data generated in three (3) test runs [RCSA §22a-174-38(i)(4)(H)(vi)].
- vii. **All Other HAPs Listed in Table III.A.1, Condition A.1.13:** The Permittee shall perform stack testing within four years from the date of issuance of this Title V operating permit [RCSA §22a-174-5(e)]. The Permittee shall measure emissions using the average of three 1-hour EPA Method 5 (in Title 40 CFR Part 60) stack tests [RCSA §22a-174-5(b)(5)].

b. Record Keeping Requirements

- i. The Permittee shall record all CEM data on a daily basis [Permit Nos. 176-0001 & 0002].
 - ii. The Permittee shall maintain records of all monitoring and testing requirements specified in compliance items ‘a.i’ - ‘a.vii’ (above), Subsection A.4.12, Section III, of this Title V operating permit. Such records shall be maintained onsite for a minimum of five years [RCSA §§22a-174-38(k)(1), 22a-174-33(o)(2) & 40 CFR §70.6(a)(3)(ii)].
13. **MWC Unit Load:** Refer to “*Operating Practices*” Subsection A.3.7, Section III of this Title V operating permit.
14. **PM Control Device Inlet Temperature:** Refer to “*Operating Practices*” Subsection A.3.7, Section III of this Title V operating permit.

Section III: Applicable Requirements and Compliance Demonstration

B. EU-03 & EU-04 (EMERGENCY ENGINES)

• APPLICABLE REQUIREMENTS

TABLE III.B: EU-03 & -04 APPLICABLE REQUIREMENTS				
Pollutant or Process Parameter	Limitations or Restrictions	Applicable Regulatory References/Citations	Compliance Demonstration Condition Number	F/S
NO _x	Less than or equal to: - 38.46 lb/hr/engine - 3.434 lb/MMBTU - 15.38 TPY ^[7]	Permit Nos. 176-0003 & 176-0004	B.1	F
SO _x	Less than or equal to: - 2.56 lb/hr/engine - 0.229 lb/MMBTU - 1.02 TPY ^[7]	Permit Nos. 176-0003 & 176-0004	B.2	F
	Less than 0.30 % sulfur by weight (dry basis) in No. 2 fuel fuel.	CGS §16a-21a		S
CO	Less than or equal to: - 8.36 lb/hr/engine - 0.746 lb/MMBTU - 3.34 TPY ^[7]	Permit Nos. 176-0003 & 176-0004	B.3	F
TSP	Less than or equal to: - 2.75 lb/hr/engine - 0.100 lb/MMBTU - 1.10 TPY ^[7]	Permit Nos. 176-0003 & 176-0004	B.4	F
No. 2 Fuel Oil	82 gal/hr/engine 32,700 gal/year/engine	Permit Nos. 176-0003 & 176-0004	B.5	F
Operating Hours	Not to exceed 400 hours per year per engine.	Permit Nos. 176-0003 & 176-0004	B.6	F

^[7] The annual emissions limit in TPY is for both engines combined.

Section III: Applicable Requirements and Compliance Demonstration

B. EU-03 & EU-04 (EMERGENCY ENGINES)

• COMPLIANCE DEMONSTRATION

1. NO_x, SO_x, CO, TSP, Operating Hours

a. Monitoring and Testing Requirements

- i. The Permittee shall monitor monthly and annual amounts of fuel consumed. A non-resettable fuel metering device shall be used to continuously monitor the fuel consumed by each emergency engine [Permit Nos. 176-0003 & -0004]; and
- ii. The Permittee shall monitor monthly and annual operating hours [Permit Nos. 176-0003 & -0004].

b. Record Keeping Requirements

- i. The Permittee shall maintain records of monthly and annual operating hours. The Permittee shall calculate annual operating hours each calendar month for each emergency engine by adding the current calendar month's operating hours to those of the previous eleven months. [Permit Nos. 176-0003 & -0004];
- ii. The Permittee shall calculate annual fuel consumption each calendar month by adding the current calendar month's fuel consumption to those of the previous eleven months [Permit Nos. 176-0003 & -0004];
- iii. The Permittee shall maintain records of monthly and annual actual emissions for each pollutant listed in Table III.B. The Permittee shall calculate annual emissions for each emergency engine each calendar month by adding the current calendar month's emissions to those of the previous eleven months [Permit Nos. 176-0003 & -0004];
- iv. The Permittee shall maintain records of shipping receipts and certifications from the fuel supplier. Such records shall certify: the name of the fuel supplier, type of fuel delivered, API gravity, the percentage of sulfur (by weight, dry basis), and the method used by the fuel supplier to determine the sulfur content of the fuel [Permit Nos. 176-0003 & -0004]; and
- v. The Permittee shall document the date, duration, and type of emergency during which each emergency engine is operated [Permit Nos. 176-0003 & -0004].

c. Reporting Requirements

The Permittee shall submit to the Commissioner written monitoring reports on a semi-annual basis [RCSA 22a-174-33(o)(1)]. Such report shall contain the following:

- i. The date and description of each deviation caused by upset or control equipment deficiencies, each deviation from a permit requirement, and each violation of a Title V operating permit requirement that has been monitored by the monitoring systems required under the Title V operating permit, which has occurred since the date of the last monitoring report; and
- ii. The date and description of each occurrence of a failure of the monitoring system to provide reliable data.

The Permittee shall certify any monitoring report submitted to the Commissioner in accordance with RCSA 22a-174-33(b)(4) [RCSA 22a-174-33(o)(2)].

Section III: Applicable Requirements and Compliance Demonstration

C. EU-05, -06, -07 (SILOS)

• APPLICABLE REQUIREMENTS

TABLE III.C: EU-05, -06, -07 APPLICABLE REQUIREMENTS					
Pollutants or Process Parameters	Emissions Unit	Limitations or Restrictions	Applicable Regulatory References/Citations	Compliance Demonstration Condition Number	F/S
TSP	EU-05	36.11 lb/hr	RCSA 22a-174-18(e)(1)	C.1	S
	EU-06	32.37 lb/hr			
	EU-07	29.60 lb/hr			

• COMPLIANCE DEMONSTRATION

1. **TSP:** Emissions of TSP shall not exceed those limits stated in condition C.1, Table III.C of this Title V operating permit. Demonstration of compliance shall be based on the following requirements:

a. Monitoring and Testing Requirements

- i. The Permittee shall monitor opacity and dust emissions from the fabric filter system during each silo loading operation. When opacity or visual emissions are detected, the Permittee shall take immediate corrective action [RCSA 22a-174-33(j)(1)(K) & 40 CFR 70.6(a)(3)(i)(B)].
- ii. The Permittee shall verify the fabric filter is meeting a pollution control efficiency of 99.90% or greater by sending the filter to the vendor for performance testing verification on a semi-annual basis [RCSA 22a-174-33(j)(1)(K) & 40 CFR 70.6(a)(3)(i)(B).]
- iii. If required by the Commissioner, the Permittee shall conduct stack test using method 5 of 40 CFR Part 60, Appendix A. Such stack tests shall be conducted at such intervals as the Commissioner may specify and in such a manner satisfactory to the Commissioner [RCSA 22a-174-5(e)(1) & -5(e)(2)].

b. Record Keeping Requirements

- i. The Permittee shall maintain records of visual emissions and any corresponding corrective actions taken [RCSA 22a-174-33(o)(1) & 40 CFR 70.6(a)(3)(iii)].
- ii. The Permittee shall maintain records of fabric filter maintenance, installation, replacement, and removal dates, and test results on a daily basis [RCSA 22a-174-33(o)(1) & 40 CFR 70.6(a)(3)(iii)].

Section III: Applicable Requirements and Compliance Demonstration

D. EU-08 (FIRE PUMP)

• APPLICABLE REQUIREMENTS

TABLE III.D: EU-08, APPLICABLE REQUIREMENTS				
Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/Citations	Compliance Demonstration Condition Number	F/S
NO _x	Less than or equal to 5 tons per year.	Approval of Registration No. 176-0005-GPEE	D.1	F
SO _x	- Less than or equal to 3 tons per year. - Less than 0.3% sulfur by weight (dry basis).			
CO	Less than or equal to 5 tons per year.			
Operating Hours	Less than 500 hours per year.			
TSP	Less than or equal to 3 tons per year.		D.2	S
	Less than or equal to 0.10 lb/MMBTU.			
Opacity	- Less than or equal to 10% opacity for a period or periods aggregating not more than five minutes in any 60 minute period; and - Opacity shall not exceed 40% at any time.		D.3	F

• COMPLIANCE DEMONSTRATION

1. NO_x, SO_x, CO, TSP, Operating Hours

a. Monitoring and Testing Requirements

- i. The Permittee shall monitor monthly and annual amounts of fuel consumed by maintaining records of fuel shipment receipts [Approval of Registration No. 176-0005-GPEE].
- ii. The Permittee shall monitor monthly and annual operating hours of the engine [Approval of Registration No. 176-0005-GPEE].

b. Record Keeping Requirements

- i. The Permittee shall maintain records of monthly and annual operating hours. Annual operating hours shall be calculated each calendar month for the engine by adding the current calendar month's operating hours to those of the previous eleven months [Approval of Registration No. 176-0005-GPEE].

Section III: Applicable Requirements and Compliance Demonstration

D. EU-08 (FIRE PUMP), CONTINUED

• COMPLIANCE DEMONSTRATION, CONTINUED

- ii. The Permittee shall determine annual fuel consumption each calendar month by adding the current calendar month's fuel consumption to those of the previous eleven months [Approval of Registration No. 176-0005-GPEE].
- iii. The Permittee shall maintain records of monthly and annual actual emissions of each pollutant listed in Table III.D. Annual emissions for each engine shall be calculated each calendar month by adding the current calendar month's emission to those of the previous eleven months [Approval of Registration No. 176-0005-GPEE].
- iv. The Permittee shall maintain records of shipping receipts and certifications from the fuel supplier. Such records shall certify: the name of the fuel supplier, type of fuel delivered, API gravity, the percentage of sulfur (by weight, dry basis), and the method used by the fuel supplier to determine the sulfur content of the fuel [Approval of Registration No. 176-0005-GPEE]; and
- v. The Permittee shall document the date, duration, and type of emergency during which the engine is operated [Approval of Registration No. 176-0005-GPEE].

c. Reporting Requirements

The Permittee shall report any violation of any applicable requirement (e.g. conditions of the General Permit) listed in Table III.D of this Title V operating permit to the Commissioner immediately upon discovery thereof [Approval of Registration No. 176-0005-GPEE].

2. **TSP:** Additional requirements beyond those listed in Condition D.1 “*Compliance Demonstration*” of this Title V operating permit are as follows:

Monitoring and Testing Requirements

If required by the Commissioner, the Permittee shall measure emissions using the average of three 1-hour EPA Method 5 (in Title 40 CFR Part 60) stack tests [RCSA 22a-174-5(b)(5)].

3. **Opacity:** Opacity shall not exceed those limits stated in Condition D.3 of Table III.D of this Title V operating permit. Demonstration of compliance shall be based on the following requirements:

a. Monitoring and Testing Requirements

The Permittee shall verify opacity using Title 40 CFR Part 60, Method 9 upon request of the Commissioner.

b. Record Keeping Requirements

The Permittee shall maintain records of the dates, times, and places of all visible emission observations, persons performing the observations, test methods used, the operating conditions at the time of observation, and the results of such observation [RCSA 22a-174-4(c)(1)].

Section III: Applicable Requirements and Compliance Demonstration

E. EU-09 (COOLING TOWER)

• APPLICABLE REQUIREMENTS

Table III.E: EU-09 APPLICABLE REQUIREMENTS				
Pollutant or Process Parameter	Limitations or Restrictions	Applicable Regulatory References/Citations	Compliance Demonstration Condition Number	F/S
TSP	60.57 lb/hr	RCSA 22a-174-18(e)(1)	E.1	S

• COMPLIANCE DEMONSTRATION

1. **TSP:** Emissions of TSP shall not exceed those limits in condition E.1, Table III.E of this Title V operating permit. Demonstration of compliance shall be based on the following requirements:

- a. **Monitoring and Testing Requirements**

The Permittee shall verify compliance with emissions rates by maintaining good operating practices for the cooling tower. The Permittee shall exercise care to minimize the following: excessive water flow, excessive airflow, and water bypassing the tower drift eliminators. The Permittee shall visually inspect the cooling tower particularly the drift eliminators on a monthly basis [RCSA 22a-174-33(j)(1)(K) & 40 CFR 70.6(a)(3)(i)(B)].

- b. **Record Keeping Requirements**

The Permittee shall keep records of maintenance on a daily basis [RCSA 22a-174-33(o)(1)].

Section III: Applicable Requirements and Compliance Demonstration

F. EU-10 (NO. 2 FUEL OIL STORAGE TANK)

▪ APPLICABLE REQUIREMENTS

TABLE III.F: EU-10 APPLICABLE REQUIREMENTS				
Pollutant or Process Parameter	Limitations or Restrictions	Applicable Regulatory References/Citations	Compliance Demonstration Condition Number	F / S
No.2 fuel oil	True vapor pressure < 15.0 kPa (Tank is restricted to storing No. 2 fuel oil)	40 CFR Part 60, Subpart Kb	F.1	F

▪ COMPLIANCE DEMONSTRATION

1. **No. 2 fuel oil:** Demonstration of compliance with Condition F.1, Table III.F of this Title V operating permit shall be based on the following requirements:

- a. **Record Keeping Requirements**

- a. The Permittee shall maintain a record of tank dimensions [40 CFR §60.113(d)].
- b. The Permittee shall maintain records of fuel oil stored [RCSA §22a-174-33(j), & 40 CFR §60.116b(c)].

Section III: Applicable Requirements and Compliance Demonstration

G. EU-11 (GASOLINE STORAGE TANK)

• APPLICABLE REQUIREMENTS

TABLE III.G: EU-11, APPLICABLE REQUIREMENTS				
Pollutants or Process Parameters	Limitations or Restrictions	Applicable Regulatory References/Citations	Compliance Demonstration Condition Number	F/S
Gasoline	There are no applicable requirements at this time for EU-11	N/A	N/A	

Section III: Applicable Requirements and Compliance Demonstration

H. PREMISES-WIDE GENERAL REQUIREMENTS

• APPLICABLE REQUIREMENTS

Table III.H: PREMISES-WIDE GENERAL APPLICABLE REQUIREMENTS			
Pollutant or Process Parameter	Applicable Regulatory References/Citations	Compliance Demonstration Requirements	Compliance Demonstration Condition No.
SO _x	RCSA §22a-174-19(a)(2) CGS §16a-21a	i) Less than or equal to 1.0% sulfur by weight (dry basis) in non-distillate fuel, and ii) Less than or equal to 0.3% sulfur by weight (dry basis) in distillate fuel.	H.1
Opacity	RCSA §22a-174-18(a)	i) Less than or equal to 20% (average of 24 consecutive observations (set) recorded at 15 second intervals - minimum of 3 sets in a 60 minute period [40 CFR Part 60, Method 9, Appendix A]); ii) Less than or equal to 40% (no longer than 5 minutes (aggregated) in any 60 minute period).	H.2
Annual Emission Statements	RCSA §22a-174-4 CT SIP	The Permittee shall record annual emissions and submit annual emissions inventory statements to the Commissioner pursuant to RCSA §22a-174-4(c)(1) and the CT SIP.	H.3
Emergency Episode Procedures	RCSA §22a-174-6	The Permittee shall comply with the procedures for emergency episodes as specified in RCSA §22a-174-6.	H.4
Public Availability of Information	RCSA §22a-174-10	The public availability of information shall apply, as specified in RCSA §22a-174-10.	H.5
Prohibition Against Concealment/ Circumvention	RCSA §22a-174-11	The Permittee shall comply with the prohibition against concealment or circumvention as specified in RCSA §22a-174-11.	H.6
Open Burning	CGS §22a-174(f)	The Permittee is prohibited from conducting open burning, except as may be allowed by CGS §22a-174(f).	H.7
Severability	RCSA §22a-174-15	Severability shall be applied as specified in the RCSA §22a-174-15.	H.8
Fugitive Dust	RCSA §22a-174-18	The Permittee shall take all reasonable precautions to prevent particulate matter from becoming airborne pursuant to the RCSA §22a-174-18.	H.9
Emission Fees	RCSA §22a-174-26	The Permittee shall be subject to payment of emissions fees in accordance with RCSA §22a-174-26.	H.10

H. PREMISES-WIDE GENERAL REQUIREMENTS, CONTINUED

Section III: Applicable Requirements and Compliance Demonstration

Table III.H: PREMISES-WIDE GENERAL APPLICABLE REQUIREMENTS, CONTINUED

Pollutant or Process Parameter	Applicable Regulatory References/ Citations	Compliance Demonstration Requirements	Compliance Demonstration Condition No.
Malfunction of Control Equipment; Reporting & Required CEM Equipment for Stationary Sources	RCSA §22a-174-7	<ol style="list-style-type: none"> 1. The Permittee shall maintain control equipment or methods in operation at all times that the source is in operation or is emitting air pollutants. 2. No person shall deliberately shut down any such control equipment, method or other instrument while the source is in operation except for such necessary maintenance as cannot be accomplished when the stationary source itself is not in operation and is not emitting air pollutants. 3. In the case of breakdown, failure, or deliberate shutdown of any control equipment, method or other instrument during which time the stationary source will be in operation, the Permittee shall take all reasonable measures to assure resumption of control as soon as possible. The Permittee shall exercise due diligence to minimize emissions while the control equipment or method is inoperative. In the event such shutdown of control equipment or methods is expected or may reasonably be expected to continue for longer than 72 hours, and if the source is to be operated at any time during that period, the Permittee shall notify the Commissioner promptly. Such notice shall include, but is not limited to the following: <ul style="list-style-type: none"> ▪ Identification of the specific equipment or instrument taken out, or to be taken out, of service as well as its locations, and where applicable, registration or permit numbers; ▪ The expected length of time that the air pollution control equipment or instrument will be out of service; ▪ The nature and quantity of emissions of air pollutants likely to be emitted during the shutdown period; ▪ Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; and ▪ The reasons that it would be impossible or impractical to shut down the stationary source operation during the maintenance period. 	H.11
Prohibition of Air Pollution	RCSA §22a-174-9	<ul style="list-style-type: none"> ▪ No person shall permit or cause air pollution as defined in RCSA §22a-174-1. This applies to air pollutants not otherwise covered by the RCSA §22a-174-1 through §22a-174-100. ▪ The Permittee shall operate the premises in accordance with all applicable emissions standards, standards of performance, and any other applicable requirements under 40 CFR, Part 60, Standards of Performance of New Stationary Sources, or Part 61, National Emission Standards for Hazardous Air Pollutants, as from time to time may be amended, which the Administrator has delegated to the Commissioner and which delegation the Commissioner has accepted. 	H.12

Section III: Applicable Requirements and Compliance Demonstration

H. PREMISES-WIDE GENERAL REQUIREMENTS, CONTINUED

• COMPLIANCE DEMONSTRATION

1. **SO_x:** Sulfur content of fuel shall not exceed those limits in condition H.1, Table III.H in this Title V operating permit. Demonstration of compliance shall be based on the following requirements:
 - a. **Monitoring and Testing Requirements**
The Permittee shall monitor records of fuel merchant certifications from the fuel supplier certifying the type of fuel, the weight percent of sulfur in the fuel, name of fuel supplier, and the method used to determine the sulfur content of fuel for each shipment [RCSA 22a-174-5(b)(1)].
 - b. **Record Keeping Requirements**
The Permittee shall maintain records of fuel merchant certifications from the fuel supplier certifying the type of fuel, the weight percent of sulfur in the fuel, name of fuel supplier, and the method used to determine the sulfur content of fuel for each shipment [RCSA 22a-174-19(a)(5)].
2. **Opacity:** Opacity shall not exceed those limits in condition H.2, Table III.H in this Title V operating permit. Demonstration of compliance shall be based on the following requirements:
 - a. **Monitoring and Testing Requirements**
The Permittee shall verify opacity using Title 40 Code of Federal Regulations Part 60, Method 9 (Upon request of the Commissioner).
 - b. **Record Keeping Requirements**
The Permittee shall maintain records of the dates, times, and places of all visible emission observations, persons performing the observations, test methods used, the operating conditions at the time of observation, and the results of such observation [RCSA 22a-174-4(c)(1)].

I. 112(r) ACCIDENTAL RELEASE REQUIREMENTS

Should the Permittee become subject to the regulations for Accidental Release, as defined in 40 CFR Part 68.3, then the Permittee shall submit a risk management plan (RMP) by the date specified in 40 CFR 68.10 and shall certify compliance with the requirements of 40 CFR Part 68 as part of the annual compliance certification as required by 40 CFR Part 70.6(c).

J. ASBESTOS REQUIREMENTS

Should the Permittee become subject to 40 CFR Part 61, Subpart M, National Emission Standards for Asbestos, when conducting any renovation or demolition at this premises, then the owner or operator shall submit proper notification as described in 40 CFR 61.145(b) and shall comply with all other applicable requirements of Subpart M.

K. STRATOSPHERIC OZONE DEPLETING SUBSTANCES (40 CFR PART 82) REQUIREMENTS

The Permittee shall comply with the standards for recycling and emissions reduction of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart F.

Section IV: Compliance Schedule

Table IV: Compliance Schedule			
Emissions Unit	Applicable Regulation	Steps Required for Achieving Compliance Milestones	Date by which Step is to be Completed
EU-10 (No. 2 Fuel Oil Storage Tank)	RCSA §22a-174-3(a)(2)	The Permittee shall submit a New Source Review permit application to the Commissioner.	No later than 30 days from date of issuance of this Title V operating permit.

Section V: State Enforceable Terms and Conditions

Only the Commissioner of the Department of Environmental Protection has the authority to enforce the terms, conditions and limitations contained in this section.

- A.** This permit does not relieve the permittee of the responsibility to conduct, maintain and operate the emissions units in compliance with all applicable requirements of any other Bureau of the Department of Environmental Protection or any federal, local or other state agency. Nothing in this permit shall relieve the permittee of other obligations under applicable federal, state and local law.
- B.** Nothing in this permit shall affect the Commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, investigate air pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the permittee by the Commissioner.
- C.** Odors: The permittee shall not cause or permit the emission of any substance or combination of substances which creates or contributes to an odor beyond the property boundary of the premises as set forth in RCSA Section 22a-174-23.
- D.** Noise: The permittee shall operate in compliance with the regulations for the control of noise as set forth in RCSA Section 22a-69-1 through 22a-69-7.4, inclusive.
- E.** Hazardous Air Pollutants (HAPs): The permittee shall operate in compliance with the regulations for the control of HAPs as set forth in RCSA Section 22a-174-29.
- F.** Open Burning: The permittee is prohibited from conducting open burning, except as may be allowed by CGS Section 22a-174(f).
- G.** Fuel Sulfur Content: The permittee shall not use #2 heating oil that exceeds three-tenths of one percent sulfur by weight as set forth in CGS Section 16a-21a.

Section VI: Permit Shield

NO PERMIT SHIELD GRANTED

In accordance with Section 22a-174-33(k) of the RCSA, a permittee complying with the conditions of this permit shall be deemed in compliance with any applicable requirements identified in Table VI below as of the date of issuance. Also, in accordance with Section 22a-174-33(k) of the RCSA, a permittee complying with the conditions of this permit shall be deemed exempt from any non-applicable requirements identified below as of the date of issuance.

This permit shall not alter or affect the following:

- A. the provisions of section 303 of the Clean Air Act, including the authority of the Administrator under the Act;
- B. the liability of an owner or operator of a Title V source for any violation of applicable requirements prior to or at the effective date of a Title V permit;
- C. the applicable requirements of the acid rain program under 40 CFR Part 72; and
- D. the ability of the Administrator or Commissioner to obtain information from the owner or operator of a Title V source.

TABLE VI: PERMIT SHIELD			
Regulated Pollutants	Emissions Units	Applicable Requirement or Non-Applicable Requirement Descriptions	Applicable Regulatory References

*For Applicability, use AR to indicate Applicable Requirement and NR for Non- Applicable Requirement

Section VII: Title V Requirements

The Administrator of the United States Environmental Protection Agency and the Commissioner of Environmental Protection have the authority to enforce the terms and conditions contained in these sections.

A. SUBMITTALS TO THE COMMISSIONER & ADMINISTRATOR

The date of submission to the Commissioner of any document required by this permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this permit, including, but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is delivered or the date three days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" means calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.

Any document required to be submitted to the Commissioner under this permit shall, unless otherwise specified in writing by the Commissioner, be directed to: Office of the Assistant Director; Compliance & Field Operations Division; Bureau of Air Management; Department of Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

Any submittal to the Administrator of the U. S. Environmental Protection Agency shall be in a computer-readable format and addressed to: Director, Air Compliance Program; Attn: Air Compliance Clerk; Office of Environmental Stewardship; US EPA, Region 1; One Congress Street; Suite 1100 (SEA); Boston, MA 02114-2023.

B. CERTIFICATIONS [RCSA § 22a-174-33(b)]

In accordance with Section 22a-174-33(b) of the RCSA, any report or other document required by this Title V permit and any other information submitted to the Commissioner or Administrator shall be signed by an individual described in Section 22a-174-2a(a) of the RCSA, or by a duly authorized representative of such individual. Any individual signing any document pursuant to Section 22a-174-33(b) of the RCSA shall examine and be familiar with the information submitted in the document and all attachments thereto, and shall make inquiry of those individuals responsible for obtaining the information to determine that the information is true, accurate, and complete, and shall also sign the following certification as provided in Section 22a-3a-5(a)(2) of the RCSA:

"I have personally examined and am familiar with the information submitted in the documents and all attachments thereto and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in this document or its attachments may be punishable as a criminal offense in accordance with Connecticut General Statutes Section 22a-6, pursuant to Section 53a-157b of the Connecticut General Statutes.≡

C. AUTHORIZED REPRESENTATIVE [RCSA 22a-174-2a(a)]

If an authorization pursuant to Section 22a-174-33(b)(2) of the RCSA is no longer effective because a different individual or position has assumed the applicable responsibility, a new authorization satisfying the requirements of Section 22a-174-2a(a)(2) of the RCSA shall be submitted to the Commissioner prior to or together with the submission of any applications, reports, forms, compliance certifications, documents or other information which is signed by an individual or a duly authorized representative of such individual pursuant to Section 22a-174-2a(a)(2) of the RCSA.

Section VII: Title V Requirements

D. ADDITIONAL INFORMATION [RCSA 22a-174-33(j)(1)(X)]

The permittee shall submit any additional information, at the Commissioner's request, within thirty (30) days of the date of the request or such shorter time as is reasonable, including, but not limited to, any information that the Commissioner may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with the terms and conditions of this permit and all applicable statutes and regulations.

In addition, within fifteen days of the date the permittee becomes aware of a change in any information submitted to the Commissioner under this permit or of any change in any information contained in the application, or that any such information was inaccurate or misleading or that any relevant information was omitted, the permittee shall submit the changed, corrected, or omitted information to the Commissioner.

E. MONITORING REPORTS [RCSA § 22a-174-33(o)(1)]

A permittee, required to perform monitoring pursuant to this permit, shall submit to the Commissioner written monitoring reports in accordance with this permit. A written monitoring report shall be submitted every six months. The first report must be received by July 30 for the time period covering January 1 through June 30 of the same year. The second monitoring report must be received by January 30 for the time period covering July 1 through December 31 of the previous year. Such monitoring reports, in addition to a summary of data recorded by continuous monitoring systems and other requirements specified herein, shall provide the following:

1. the date and description of each deviation from the terms and conditions of the permit caused by upset or control equipment deficiencies, each deviation from a permit requirement, and each violation of a requirement of this permit that has been monitored by the monitoring systems required under this permit, which has occurred since the date of the last monitoring report; and
2. the date, duration, and description of each occurrence of a failure of the monitoring system to provide reliable data; and
3. the date, duration, and description of the upset or control equipment deficiency, including the cause thereof, and the remedial action taken.

F. PREMISES RECORDS [RCSA § 22a-174-33(o)(2)]

Unless otherwise required by this permit, the permittee shall maintain records of all required monitoring data and supporting information, and shall keep such records at the subject premises and make such records available for inspection and for copying by the Commissioner at the premises, for at least five years from the date such data and information were obtained. Such records shall be submitted to the Commissioner upon request. In addition to the other record keeping requirements specified herein, supporting information shall include:

1. the type of monitoring, which may include the record keeping, by which such monitoring data was obtained;
2. the date, place, and time of sampling or measurements;
3. the date(s) analyses of such samples or measurements were performed;
4. the name and address of the entity that performed the analyses;
5. the analytical techniques or methods used for such analyses and sampling;

Section VII: Title V Requirements

6. the results of such analyses;
7. the operating conditions at the subject source at the time of such sampling or measurement; and
8. all calibration and maintenance records relating to the instrumentation used in such sampling or measurements, all original strip-chart recordings or computer printouts generated by continuous monitoring instrumentation, and copies of all reports required by this Title V permit.

G. PROGRESS REPORTS [RCSA § 22a-174-33(q)(1)]

The permittee shall, on the schedule specified in this permit or every six months, whichever is more frequent, submit to the Commissioner and the Administrator progress reports in accordance with Section 22a-174-33(q)(1) and (3) of the RCSA which are certified in accordance with Subsection B of Section VII of this permit and which report the permittee's progress in achieving compliance under the compliance schedule in this permit. Such progress report shall contain those items identified in Section 22a-174-33(q)(1) of the RCSA.

H. COMPLIANCE CERTIFICATIONS [RCSA § 22a-174-33(q)(2)]

The permittee shall submit a certification (received by January 30 for the time period covering the previous calendar year) to the Commissioner and Administrator, in writing, that the terms and conditions and applicable requirements of this permit have been complied with by the permittee. Certifications shall be in accordance with Subsection B of Section VII of this permit. In addition, a compliance certification shall contain those items identified in Section 22a-174-33(q)(2) of the RCSA.

I. PERMIT DEVIATION NOTIFICATIONS [RCSA § 22a-174-33(p)]

Notwithstanding Subsection D of Section VII of this permit, the permittee shall notify the Commissioner in writing, on forms prescribed by the Commissioner, of any deviation from an emissions limitation, and shall identify the cause or likely cause of such deviation, all corrective actions and preventive measures taken with respect thereto, and the dates of such actions and measures as follows:

1. For any hazardous air pollutant, no later than twenty-four (24) hours after such deviation commenced; and
2. For any other regulated air pollutant, no later than ten (10) days after such deviation commenced.

J. PERMIT EXPIRATION AND RENEWAL APPLICATION [RCSA § 22a-174-33(j)(1)(B)]

Upon expiration of this permit, the permittee shall not continue to operate the subject source emissions units unless a timely (as defined in 40 CFR subpart 70.5) and complete renewal application has been submitted pursuant to Sections 22a-174-33(g), -33(h), and -33(i) of the RCSA and 40 CFR subparts 70.5 and 70.7.

Section VII: Title V Requirements

K. OPERATE IN COMPLIANCE [RCSA § 22a-174-33(j)(1)(C)]

The permittee shall operate the Title V source in compliance with the terms of all applicable administrative regulations, the terms of this permit, and any other applicable provisions of law. Any noncompliance with this permit constitutes a violation of the Clean Air Act and Chapter 446c of the Connecticut General Statutes and is grounds for federal and/or state enforcement action; permit termination, revocation, or modification; or denial of a permit renewal application.

L. COMPLIANCE WITH PERMIT [RCSA § 22a-174-33(j)(1)(G)]

This permit shall not be deemed to:

1. preclude the creation or use of emission reduction credits or the trading of such credits in accordance with subparagraphs 22a-174-33(j)(1)(I) and 22a-174-33(j)(1)(P) of the RCSA, provided that the Commissioner's prior written approval of the creation, use, or trading is obtained;
2. authorize emissions of an air pollutant so as to exceed levels prohibited under 40 CFR Part 72;
3. authorize the use of allowances pursuant to 40 CFR Parts 72 through 78, inclusive, as a defense to noncompliance with any other applicable requirement; or
4. impose limits on emissions from items or activities specified in subparagraphs (A) and (B) of subdivision 22a-174-33(g)(3) of the RCSA unless imposition of such limits is required by an applicable requirement.

M. INSPECTION TO DETERMINE COMPLIANCE [RCSA § 22a-174-33(j)(1)(M)]

The Administrator and/or the Commissioner, or a representative thereof may, for the purpose of determining compliance with the permit and other applicable requirements, enter the subject premises at all reasonable times without prior notice, to inspect any facilities, equipment, practices, or operations regulated or required under this permit; to sample or monitor substances or parameters; and to have access to review and copy relevant records lawfully required to be maintained at such source in accordance with this permit. It shall be grounds for permit revocation should entry inspection, sampling, or monitoring be denied or effectively denied, or if access to and the copying of relevant records is denied or effectively denied.

N. PERMIT AVAILABILITY

The permittee shall have available at the facility at all times a copy of this Title V Operating Permit.

O. SEVERABILITY CLAUSE [RCSA § 22a-174-33(j)(1)(R)]

The provisions of this permit are severable. If any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the remainder of this permit and the application of such provision to other circumstances shall not be affected.

P. NEED TO HALT OR REDUCE ACTIVITY [RCSA § 22a-174-33(j)(1)(T)]

The permittee's need to halt or reduce operations at the Title V source shall not be a defense to noncompliance with this permit in an enforcement action concerning a violation of the permit.

Section VII: Title V Requirements

Q. PERMIT REQUIREMENTS [RCSA § 22a-174-33(j)(1)(V)]

The filing of an application by the permittee for a permit modification, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay compliance with any permit requirement.

R. PROPERTY RIGHTS [RCSA § 22a-174-33(j)(1)(W)]

This permit does not convey any property rights or any exclusive privileges. This permit is subject to, and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the facility or regulated activity affected thereby, including Section 4-181a(b) of the Connecticut General Statutes and Section 22a-3a-5(b) of the RCSA. This permit shall neither create nor affect any rights of persons who are not parties to this permit.

S. ALTERNATIVE OPERATING SCENARIO RECORDS [RCSA § 22a-174-33(o)(3)]

The permittee shall, contemporaneously with making a change authorized by this permit from one alternative operating scenario to another, maintain a record at the premises indicating when changes are made from one operating scenario to another and shall maintain a record of the current alternative operating scenario.

T. OPERATIONAL FLEXIBILITY AND OFF-PERMIT CHANGES [RCSA § 22a-174-33(r)(2)]

The permittee may engage in any of the activities identified in Section 22a-174-33(r)(2)(A) of the RCSA in accordance with Section 22a-174-33(r)(2)(B) of the RCSA, as long as such activity does not constitute a modification pursuant to Section 22a-174-2a(d)(4) of the RCSA; constitute a modification under 40 CFR Part 60, 61 or 63; constitute an action which would subject the permittee to any standard or other requirement pursuant to 40 CFR 72 to 78, inclusive; or exceed emissions allowable under this permit.

At least seven (7) days before initiating an action specified in subparagraph RCSA § 22a-174-33(r)(2)(A) of the RCSA, the permittee shall notify the Administrator and the Commissioner in writing of such intended action.

U. INFORMATION FOR NOTIFICATION [RCSA § 22a-174-33(r)(2)(A))]

Written notification required under subdivisions 22a-174-33(r)(2) of the RCSA shall include a description of each change to be made, the date on which such change will occur, any change in emissions that may occur as a result of such change, any Title V permit terms and conditions that may be affected by such change, and any applicable requirement that would apply as a result of such change. The permittee shall thereafter maintain a copy of such notice with the Title V permit. The Commissioner and the permittee shall each attach a copy of such notice to their copy of the permit.

V. TRANSFERS [RCSA § 22a-174-2a(g)]

No person other than the permittee shall act or refrain from acting under the authority of this permit unless this permit has been transferred to another person in accordance with Connecticut General Statute Section 22a-60. The proposed transferor and transferee of a permit shall submit to the Commissioner a request for a permit transfer on a form provided by the Commissioner. A request for a permit transfer shall be accompanied by any fees required by any applicable provision of the general statutes or regulations adopted thereunder. The Commissioner may also require the proposed transferee to submit with any such request, the information identified in CGS Section 22a-6m.

Section VII: Title V Requirements

W. REVOCATION [RCSA § 22a-174-2a(h)]

The Commissioner may revoke this permit on his own initiative or on the request of the permittee or any other person, in accordance with section 4-182c of the Connecticut General Statutes, subsection (d) of section 22a-3a-5 of the RCSA, and any other applicable law. Any such request shall be in writing and contain facts and reasons supporting the request. The permittee requesting revocation of this permit shall state the requested date of revocation and provide the Commissioner with satisfactory evidence that the emissions authorized by this permit have been permanently eliminated.

Pursuant to the Clean Air Act, the Administrator has the power to revoke this permit. Pursuant to the Clean Air Act, the Administrator also has the power to reissue this permit if the Administrator has determined that the Commissioner failed to act in a timely manner on a permit renewal application.

This permit may be modified, revoked, reopened, reissued, or suspended by the Commissioner, or the Administrator in accordance with RCSA § 22a-174-33(r), Connecticut General Statutes Section 22a-174c, or subsection (d) of Section 22a-3a-5.

X. REOPENING FOR CAUSE [RCSA § 22a-174-33(s)]

This permit may be reopened by the Commissioner, or the Administrator in accordance with RCSA § 22a-174-33(s).

Y. CREDIBLE EVIDENCE

Notwithstanding any other provision of this permit, for the purpose of determining compliance or establishing whether a permittee has violated or is in violation of any permit condition, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information.